



DEPARTMENT OF THE NAVY

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS ANNUAL REPORT

FISCAL YEAR 2014

Prepared by:

Department of the Navy
Technology Transfer Program Office
Arlington, VA

December 2014

Approved for public release; distribution unlimited

Table of Contents

Listing of Tables	ii
Listing of Figures.....	ii
Listing of Acronyms	iii
Introduction.....	1
Other Technology Transfer Activity.....	2
Appendix A – DoN CRADA Income and History Cumulative Record, FY89 through FY14	A-1
Appendix B – FY14 DoN CRADA Income and History by Laboratory	B-1
Naval Air Warfare Center Aircraft Division, Lakehurst.....	B-2
Naval Air Warfare Center Aircraft Division, Patuxent River	B-4
Naval Air Warfare Center Training Systems Division	B-6
Naval Air Warfare Center Weapons Division, China Lake	B-8
Naval Air Warfare Center Weapons Division, Point Mugu.....	B-10
Naval Facilities Engineering and Expeditionary Warfare Center.....	B-12
Naval Medical Center, Portsmouth	B-14
Naval Medical Center, San Diego	B-16
Naval Medical Research and Development Command.....	B-18
Naval Meteorology and Oceanography Command	B-20
Naval Postgraduate School.....	B-22
Naval Research Laboratory.....	B-24
Naval Surface Warfare Center, Carderock Division.....	B-26
Naval Surface Warfare Center, Crane Division.....	B-28
Naval Surface Warfare Center, Dahlgren Division	B-30
Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division .	B-32
Naval Undersea Warfare Center, Division Keyport	B-34
Naval Undersea Warfare Center, Division Newport	B-36
Naval War College	B-38
Office of Naval Research	B-40
Space and Naval Warfare Systems Command, Systems Center Atlantic	B-42
Space and Naval Warfare Systems Command, Systems Center Pacific	B-44
United States Naval Academy	B-46
Appendix C – FY14 CRADA Listing.....	C-1

Listing of Tables

Table 1	FY14 First Responder Technologies.....	3
Table 2	FY14 Partnership Intermediary Agreements.....	4
Table A-1	DoN CRADA Cumulative Record from FY89 through FY14.....	A-2
Table A-2	DoN CRADA History	A-3
Table A-3	FY14 Amendments to CRADAs Received.....	A-3

Listing of Figures

Figure A-1	DoN CRADA Income.....	A-4
Figure A-2	Number of DoN CRADAs Signed.....	A-4

Listing of Acronyms

COTS	Commercial Off-The-Shelf
CRADA	Cooperative Research and Development Agreement
DoN	Department of the Navy
FY	Fiscal Year
LP-CRADA	Limited Purpose Cooperative Research and Development Agreement
NDTTIS	Navy Defense Technology Transfer Information System
NSWC	Naval Surface Warfare Center
NUWC	Naval Undersea Warfare Center
PIA	Partnership Intermediary Agreement
PO	Program Office
R&D	Research and Development
Std/Non-Std	Standard/Non-Standard
T2	Technology Transfer

This page intentionally left blank.

Introduction

The Department of the Navy (DoN) Cooperative Research and Development Agreements (CRADAs) are legal agreements between a DoN Research and Development (R&D) laboratory and one or more non-federal partners to conduct joint R&D efforts in a given technical area consistent with the laboratory's mission and to share technical results derived from the joint effort. CRADA partners can save money and valuable time in achieving mutually desirable results. A non-federal partner can provide facilities, equipment, personnel, and funding to the CRADA. The DoN laboratory can provide the same resources with the exception of funding.

CRADAs are valuable mechanisms to strengthen the United States industrial base by transferring technology developed in the DoN to the private sector. In addition, the transfer and acceptance of commercial off-the-shelf (COTS) technology for government use can reduce the cost of items purchased by the federal government.

The value to the DoN, as well as the United States industrial base, can be demonstrated by the number and quality of technologies that have received national recognition via the Federal Laboratory Consortium's National Awards for Excellence in Technology Transfer (T2). A sampling of the DoN technologies that received national recognition is listed below. Each of these technologies would not have succeeded without the use of one or more CRADAs between the DoN laboratory and its partners:

- Naval Undersea Warfare Center (NUWC), Division Newport instituted and validated a comprehensive technology test and evaluation protocol that identified the strengths and weaknesses of commercially available systems to detect and respond to in-water threats to military pier side and shore-based facilities. Multiple CRADAs and intergovernmental agreements were used to transfer this evaluation capability to the Department of Homeland Security, the Department of Interior Bureau of Reclamation, the Army Corps of Engineers, the University of Kentucky, the Dam Waterside Security R&D Task Group and port and waterside facilities. As a result, these government agencies, academia, and private industry now have a rigorous evaluation capability to assist with the development, test, and evaluation of waterside security systems for critical infrastructure protection.
- Two researchers at NUWC, Division Newport developed a test fixture that enables an accurate study of a diverse range of materials including fabrics, composites, metals, and biological tissues. Two CRADAs with an American company and a Canadian university led to the use of this test fixture in the design, test, and fabrication of novel materials and structures for bridge decking and rigid inflatable boats. As a result, not only were new materials developed, but physical prototype costs and development lead times were minimized.
- For more than seven years, Naval Surface Warfare Center (NSWC), Crane Division has engaged in a highly successful transfer of ultra-short pulse laser technology that is yielding substantial commercial and military benefits. These include deterring enemy threats, improving fuel injector efficiency, performing precise eye surgery with less risk, and strengthening glass screens on consumer electronics. At least five CRADAs were established to help outside partners gain access to lasers and other specialized expertise, equipment, and facilities at NSWC, Crane Division. These CRADAs have resulted in the startup of two new businesses and the development of novel applications in both the commercial and military sectors.

The DoN uses a standard CRADA format for most agreements as well as two specialty CRADA formats: Technical Assistance mini-CRADA and Limited Purpose CRADA (LP-CRADA). The mini-CRADA, also known as a Request for Cooperative Research, allows local companies to utilize a laboratory's facilities and technical expertise for a limited time (maximum four days) for a specific project. LP-CRADAs are restricted to the exchange of existing equipment or material that the collaborators need for their own research, development, test, evaluation, or engineering activities. There is no joint work performed under the LP-CRADA, but there is a mutual interest in the results.

Benefits, other than direct cash funding, result in the cost savings accrued as the result of leveraging the personnel, technical competence, facilities, equipment, and property of the other partner(s) to achieve a specific technology development. This benefit is termed "cost avoidance." It is the additional cost in labor, facilities, equipment, and property that a partner would have experienced in achieving the desired technology development had the cooperative development partnership not been in place. Cost avoidance experienced by the individual partner(s) of a CRADA is usually different for each partner; but is sufficient to cause the partner to become a member of the partnership. Cost avoidance is not documented; but is an important consideration in each CRADA decision for both the DoN laboratory and the private partner.

Signature authority for DoN CRADAs was completely decentralized in fiscal year (FY) 00 and CRADAs are initiated without DoN T2 Program Office (PO) involvement. The DoN T2 PO receives a copy of all signed CRADAs and CRADAs are credited to the year received. Modified or extended CRADAs are not credited again. The entire income for each CRADA, including amended sums from terminations and modifications, is credited to the year the original CRADA is received. As a result, the CRADA income for a particular year may fluctuate up or down.

The DoN's overall income from and participation in CRADAs since FY89 are summarized in *Appendix A*. The DoN laboratories with a total of 10 or more CRADAs reported for FY89 through FY14 have individual income and history bar charts listed in *Appendix B*. A listing of the CRADA non-federal partner and subject for each FY14 CRADA is provided in *Appendix C*.

Other Technology Transfer Activity

The DoN T2 PO updates the Navy Defense Technology Transfer Information System (NDTTIS) database. It captures information identifying third-party funding, first responder technology, and Partnership Intermediary Agreements (PIAs).

Additional funding received by DoN laboratories from third-party government sponsors to support CRADAs is not reported but is being tracked. Third-party funding can originate as funding grants or money from other governmental agencies outside of the original agreement. This year, third-party funding reported \$3.4M additional income.

In FY14, five CRADAs were identified as first responder technologies from three different Navy laboratories. Table 1 identifies the laboratory, non-federal partner, and the first responder CRADA subject.

Table 1. FY14 First Responder Technologies

Lab Name	Non-Federal Partner	Subject
Naval Postgraduate School	Unconventional Concepts, Inc.	Design, Development, and Assessment of a Tethered Long-Endurance UAV for Homeland Security Applications
Naval Postgraduate School	University of Maryland	Comparing Failed, Foiled, Completed, and Successful Terrorist Attacks
NSWC Dahlgren Division	First Line Technology, LLC	Dahlgren Decontaminant
NSWC Dahlgren Division	Solvay Chemicals, Inc.	Commercialization of Dahlgren Decontaminant Technology
Space and Naval Warfare Systems Command, Systems Center Pacific	Oceus Networks, Inc.	Equipment Transfer of Satellite Communications Hardware, Sensors, and Software Applications from Oceus Networks, Inc. to Space and Naval Warfare Systems Command, Systems Center Pacific

A PIA is an agreement between the DoN and the agency of a state or local government or a nonprofit entity. It is used to allow the intermediary to identify new technologies in the private sector that can be utilized by the DoN, to accelerate delivery of technological capabilities to the nation, and to help identify DoN technologies that can be licensed and commercialized. Table 2 details the PIAs entered into in FY14.

Table 2. FY14 Partnership Intermediary Agreements

Lab Name	Non-Federal Partner	Subject
NSWC, Crane Division	Greater Indianapolis Chamber of Commerce	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served by the Greater Indianapolis Chamber of Commerce
NSWC, Crane Division	The Growth Alliance for Greater Evansville	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served by The Growth Alliance for Greater Evansville
NSWC, Crane Division	Ivy Tech Community College Bloomington Region	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served by Ivy Tech Community College Bloomington Region
NSWC, Crane Division	Purdue Research Foundation	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served in the West Lafayette Region by Purdue Research Foundation
NSWC, Crane Division	Purdue University	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served in the West Lafayette Region by Purdue University
NSWC, Crane Division	Purdue University on behalf of Indiana University - Purdue University Fort Wayne	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served in the Fort Wayne Region by Purdue University
NSWC, Crane Division	Radius Indiana	PIA to Promote Cooperative Activities Between NSWC, Crane Division and Small Business Firms and Educational Institutions Served by Radius Indiana



APPENDIX A

DoN CRADA Income and History Cumulative Record, FY89 through FY14

Table A-1. DoN CRADA Cumulative Record from FY89 through FY14

Lab Name	Cumulative Number of CRADAs
Fleet Readiness Center East	2
Fleet Readiness Center Southwest	5
Marine Corps Combat Development Command	2
*National Naval Medical Center	65
Naval Air Warfare Center	
Aircraft Division, Lakehurst	13
Aircraft Division, Patuxent River	174
Training Systems Division	48
Weapons Division, China Lake	244
Weapons Division, Point Mugu	51
Naval Aviation Depot	
Jacksonville	1
North Island	2
Naval Facilities Engineering and Expeditionary Warfare Center	27
Naval Medical Center	
Portsmouth	143
San Diego	272
Naval Medical Research and Development Command	803
Naval Meteorology and Oceanography Command	20
Naval Postgraduate School	268
Naval Research Laboratory	455
Naval Sea Systems Command	2
Naval Surface Warfare Center	
Carderock Division	162
Corona Division	2
Crane Division	101
Dahlgren Division	155
**Indian Head Explosive Ordnance Disposal Technology Division	175
Panama City Division	4
Port Hueneme Division	3
Naval Undersea Warfare Center	
Division Keyport	12
Division Newport	261
Naval War College	13
Navy Clothing and Textile Research Facility	7
Navy Disease Vector Ecology and Control Center	1
Navy Experimental Diving Unit	2
Office of Naval Research	11
Space and Naval Warfare Systems Command, Systems Center Atlantic	21
Space and Naval Warfare Systems Command, Systems Center Pacific	163
United States Atlantic Command	1
United States Naval Academy	43
United States Naval Observatory	1
TOTAL	3,735

* Walter Reed National Military Medical Center was established on November 10, 2011, as a result of the Base Realignment and Closure Act, which consolidated National Naval Medical Center and Walter Reed Army Medical Center on the grounds of the former National Naval Medical Center campus in Bethesda, Maryland. Due to the realignment, CRADAs from this laboratory are no longer being reported to the DoN.

**As of February 28, 2013, NAVSEA directed, and the Secretary of the Navy approved, the merger of the Naval Surface Warfare Center, Indian Head Division (NSWC IHD) and the Naval Explosive Ordnance Disposal Technology Division (EODTECHDIV). These two organizations will form the Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division (NSWC IHEODTECHDIV). The new Command, NSWC IHEODTECHDIV, retains the mission, functions, and technical capabilities of both organizations.

Table A-2. DoN CRADA History

Fiscal Year	CRADA Income*	Number of CRADAs Signed			
		Standard/ Non-Standard (Std/Non-Std)	LP-CRADA**	Total	Cumulative
1989-2002	\$64,785,452	1,039	245	1,284	1,284
2003	\$12,266,374	159	36	195	1,479
2004	\$16,223,011	159	40	199	1,678
2005	\$13,761,266	127	51	178	1,856
2006	\$17,685,070	149	45	194	2,050
2007	\$13,973,555	160	41	201	2,251
2008	\$9,222,720	147	51	198	2,449
2009	\$9,925,482	153	46	199	2,648
2010	\$19,450,768	174	48	222	2,870
2011	\$13,574,767	155	45	200	3,070
2012	\$16,707,260	141	51	192	3,262
2013	\$10,299,600	151	76	227	3,489
2014	\$13,556,671	169	77	246	3,735

* The entire income for each CRADA is credited to the year that the CRADA was received at DoN T2 PO. Funds received under any amendments are allocated to the year the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

Table A-3. FY14 Amendments to CRADAs Received

Lab Name	Amendments Applied to Current Year CRADAs	Amendments Applied to Previous Year CRADAs
Naval Medical Center, Portsmouth		\$9,000
Naval Medical Center, San Diego		\$80,000
Naval Medical Research and Development Command	\$50,019	\$2,503,186
Naval Postgraduate School		\$595,407
Naval Research Laboratory	\$55,000	\$69,959
Naval Surface Warfare Center, Carderock Division		\$9,000
Naval Surface Warfare Center, Crane Division		\$3,663
Naval Surface Warfare Center, Dahlgren Division		\$622,451
Naval Surface Warfare Center, Indian Head		
Explosive Ordnance Disposal Technology Division	\$20,000	\$136,000
Naval Undersea Warfare Center, Division Newport		\$282,000
United States Naval Academy		\$105,816
Totals	\$125,019	\$4,416,482

The DoN has entered into 3,735 CRADAs and received \$231,431,996 from non-federal CRADA partners to support this work since 1989. These funds directly support ongoing research projects at the DoN laboratories. Income from new CRADAs signed in FY14 (\$13,431,652) as well as amendments to CRADAs signed in FY14 (\$125,019) totaled \$13,556,671 (see Table A-2). Amendments to CRADAs signed in previous years generated additional income in FY14 of \$4,416,482 (see Table A-3) for a grand total of FY14 income of \$17,973,153.

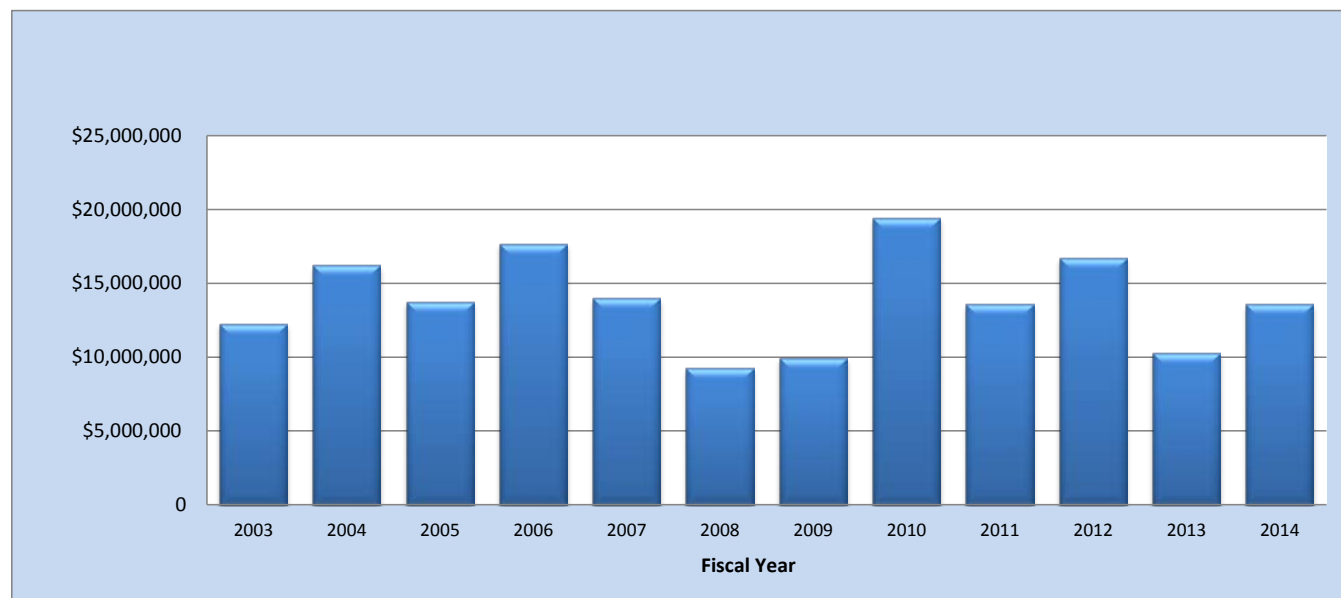


Figure A-1. DoN CRADA Income

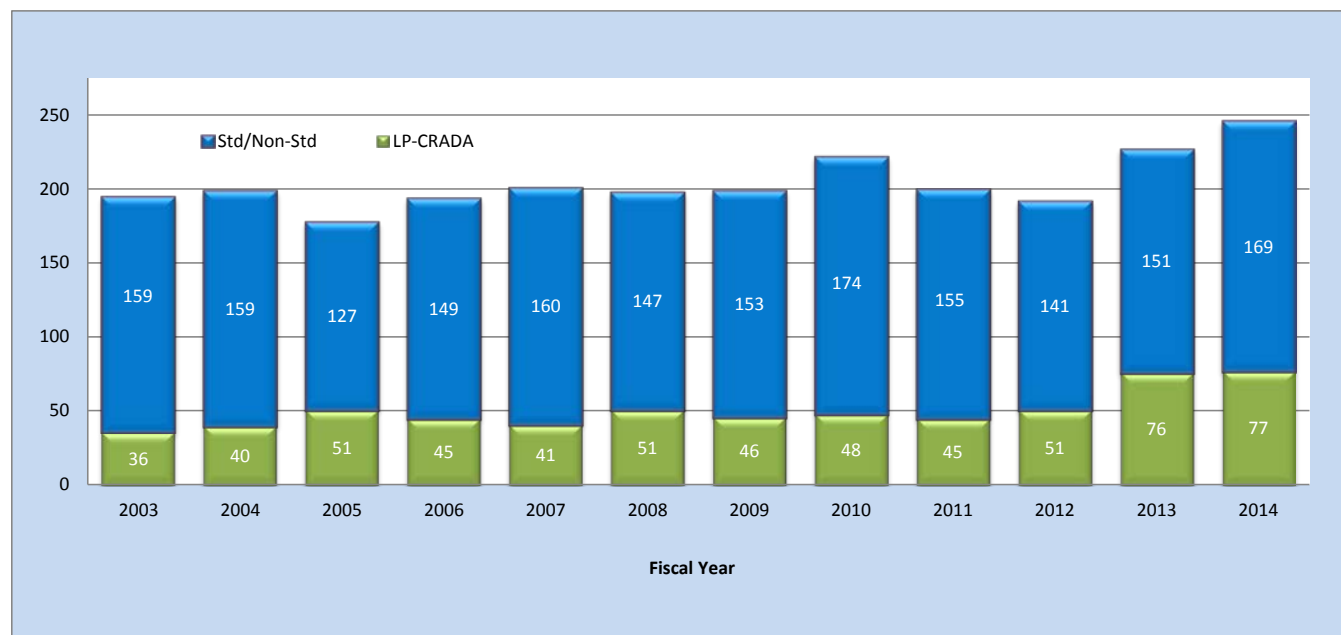


Figure A-2. Number of DoN CRADAs Signed



APPENDIX B

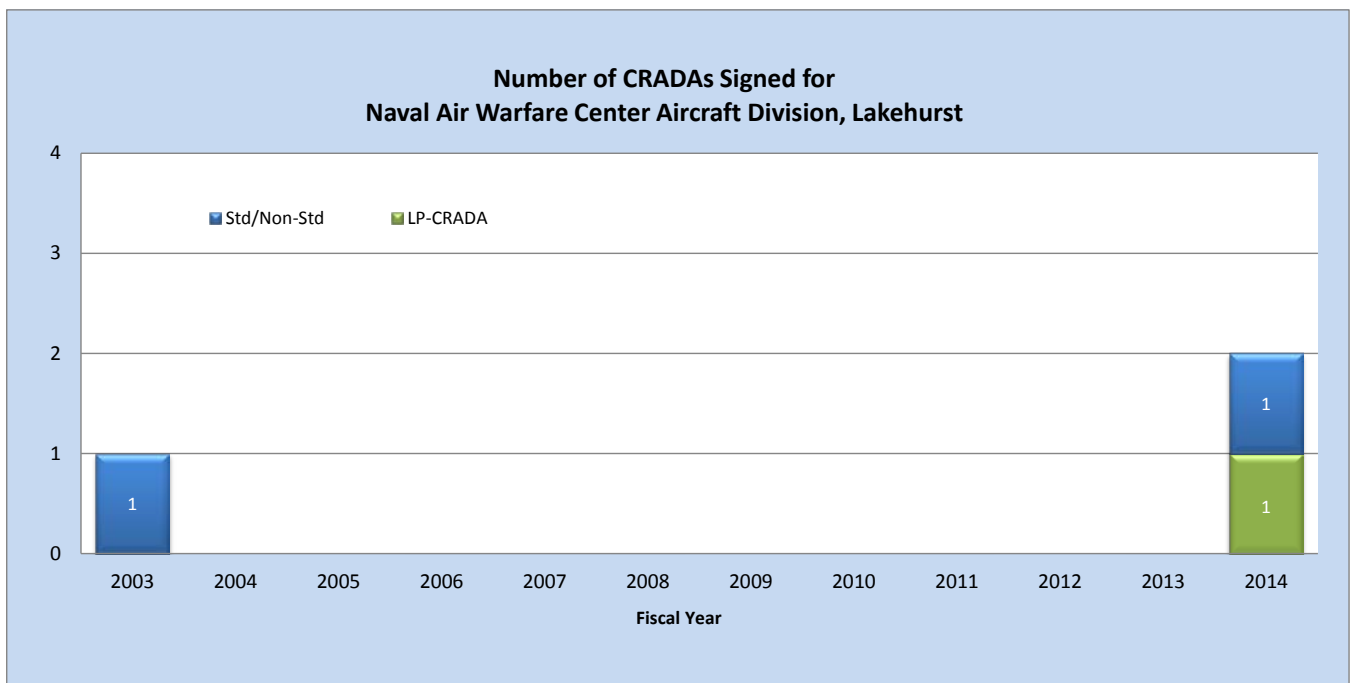
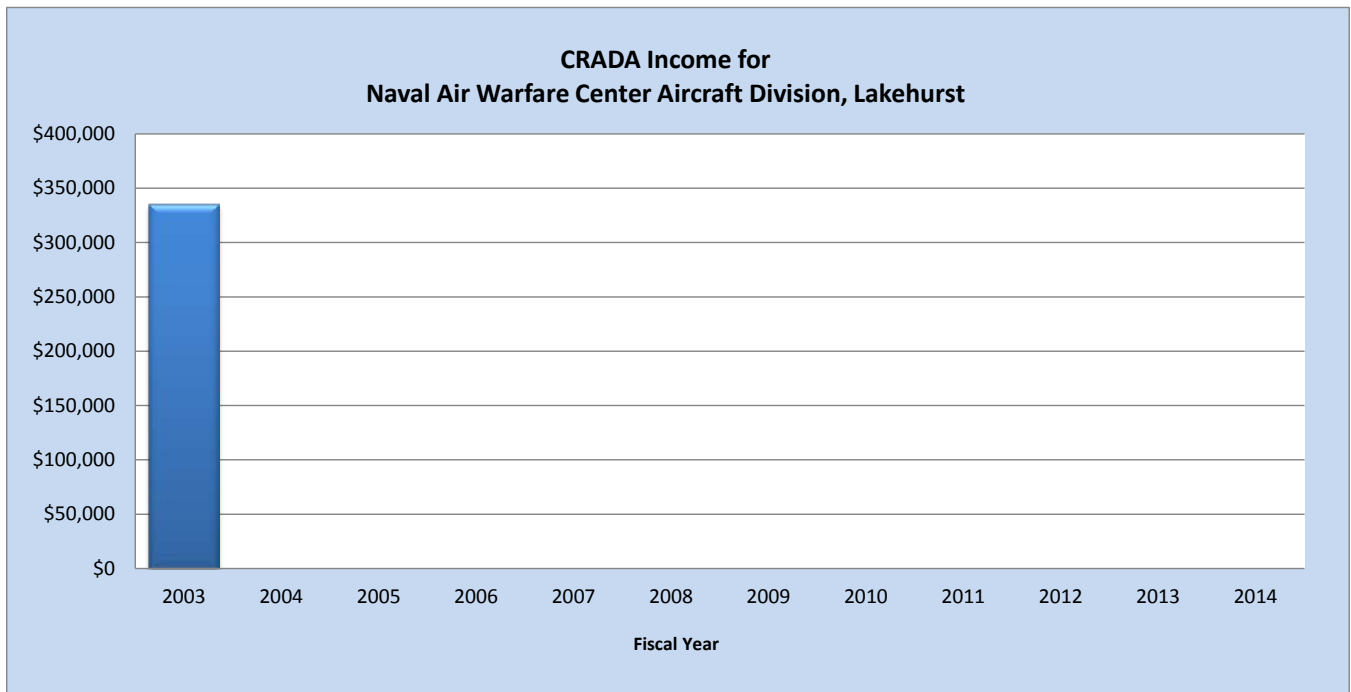
FY14 DoN CRADA Income and History by Laboratory

**CRADA History for
Naval Air Warfare Center Aircraft Division, Lakehurst**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$63,300		10	-	10	10
2003	\$335,000		1	-	1	11
2004	\$0		-	-	-	11
2005	\$0		-	-	-	11
2006	\$0		-	-	-	11
2007	\$0		-	-	-	11
2008	\$0		-	-	-	11
2009	\$0		-	-	-	11
2010	\$0		-	-	-	11
2011	\$0		-	-	-	11
2012	\$0		-	-	-	11
2013	\$0		-	-	-	11
2014	\$0		1	1	2	13

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

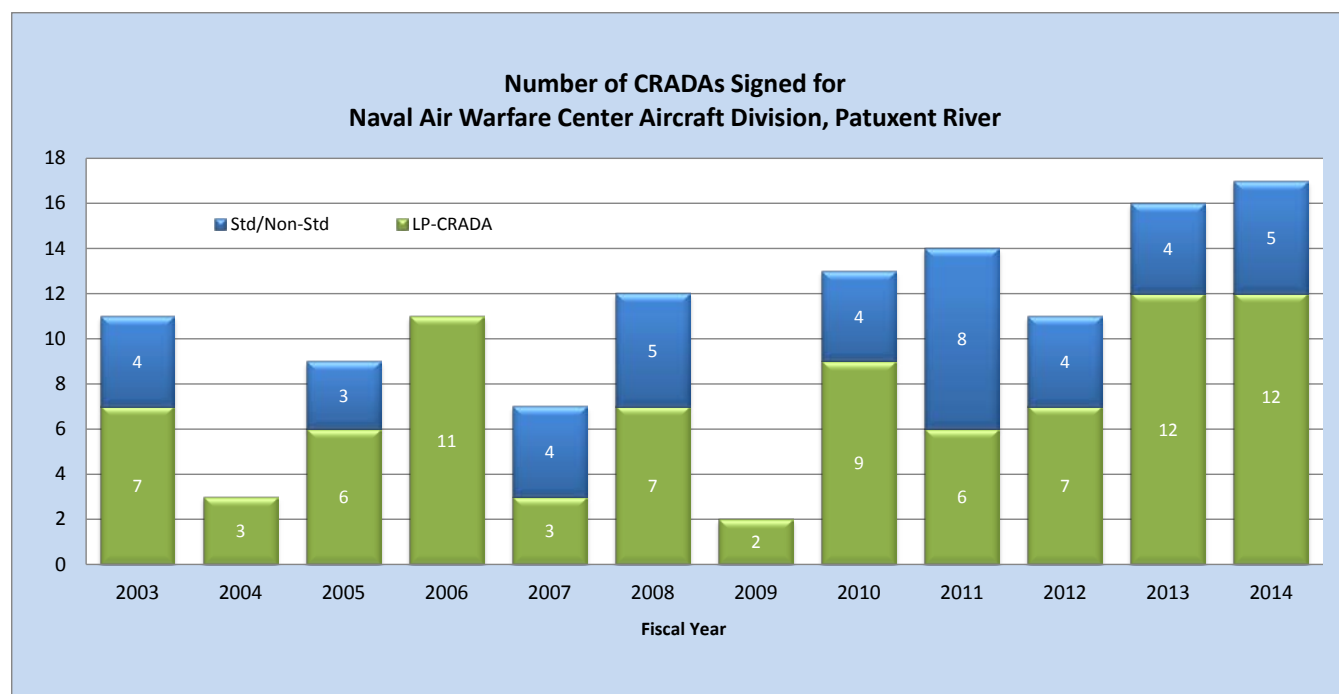
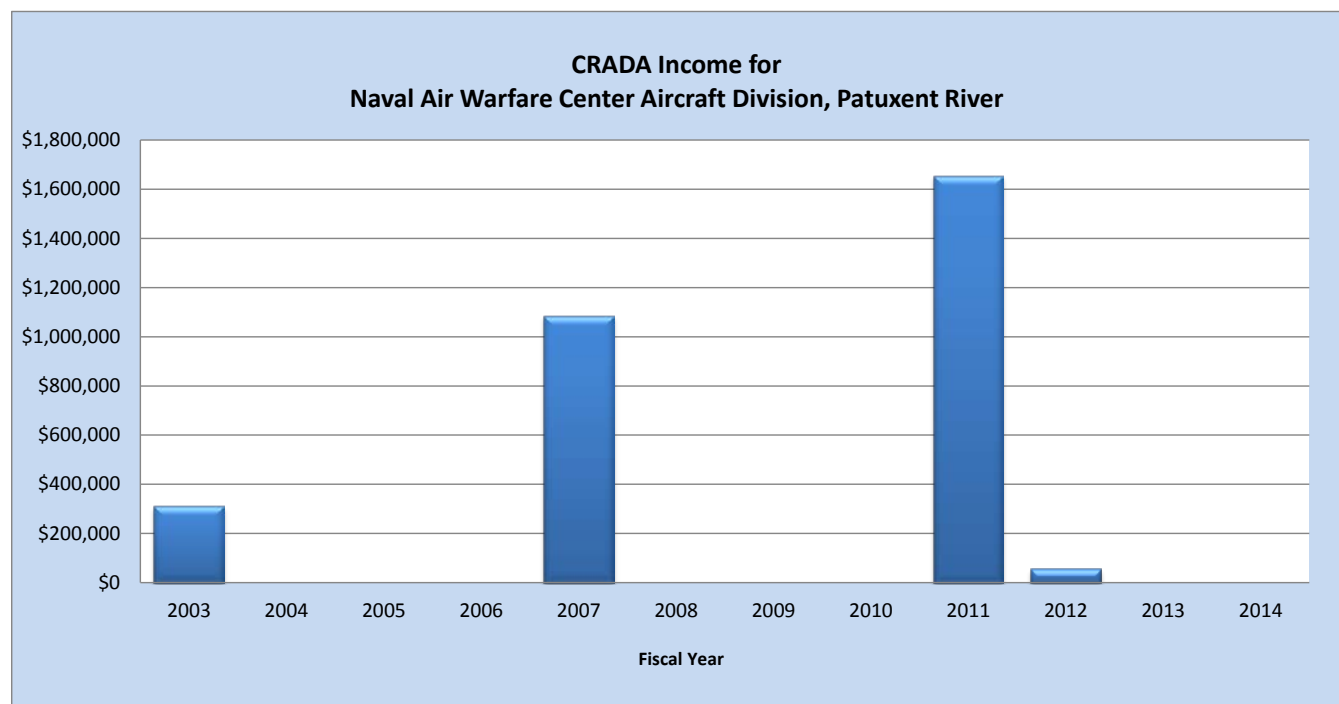


**CRADA History for
Naval Air Warfare Center Aircraft Division, Patuxent River**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$1,764,910		48	-	48	48
2003	\$310,000		4	7	11	59
2004	\$0		-	3	3	62
2005	\$0		3	6	9	71
2006	\$0		-	11	11	82
2007	\$1,086,000		4	3	7	89
2008	\$0		5	7	12	101
2009	\$0		-	2	2	103
2010	\$0		4	9	13	116
2011	\$1,654,287		8	6	14	130
2012	\$54,500		4	7	11	141
2013	\$0		4	12	16	157
2014	\$0		5	12	17	174

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

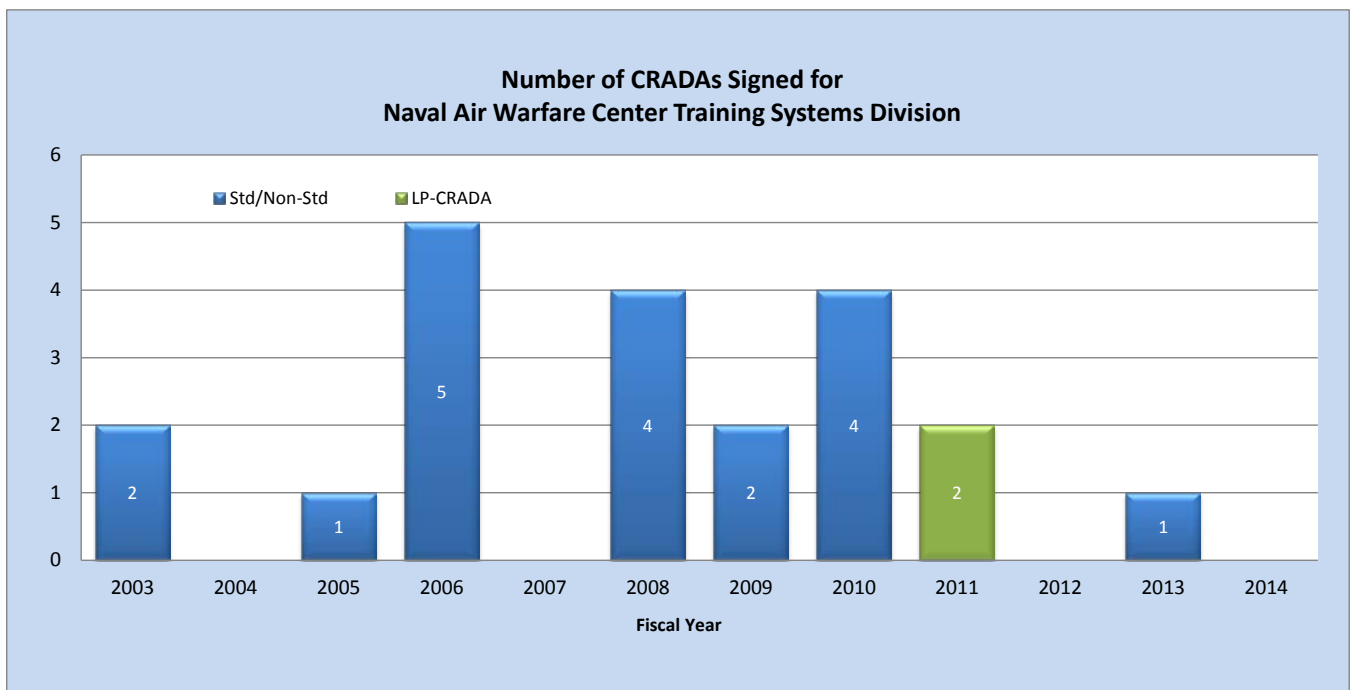
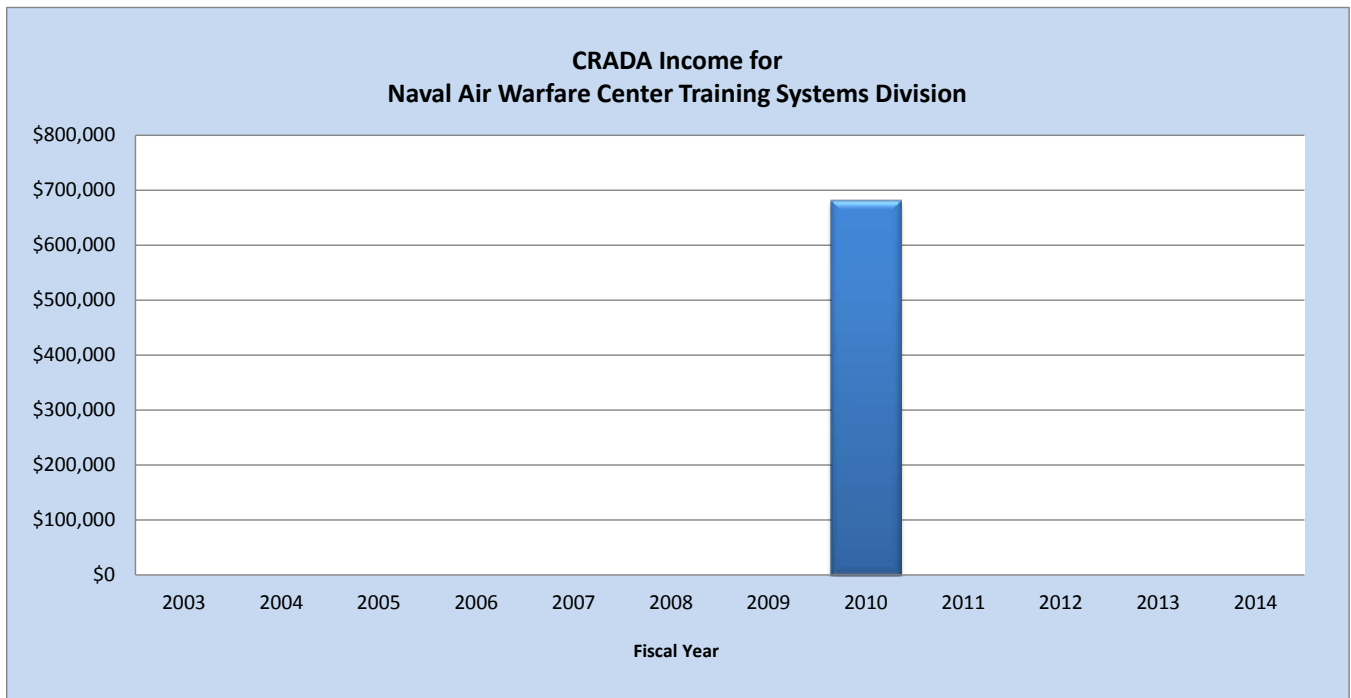


**CRADA History for
Naval Air Warfare Center Training Systems Division**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$13,000		27	-	27	27
2003	\$0		2	-	2	29
2004	\$0		-	-	-	29
2005	\$0		1	-	1	30
2006	\$0		5	-	5	35
2007	\$0		-	-	-	35
2008	\$0		4	-	4	39
2009	\$0		2	-	2	41
2010	\$681,496		4	-	4	45
2011	\$0		-	2	2	47
2012	\$0		-	-	-	47
2013	\$0		1	-	1	48
2014	\$0		-	-	-	48

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

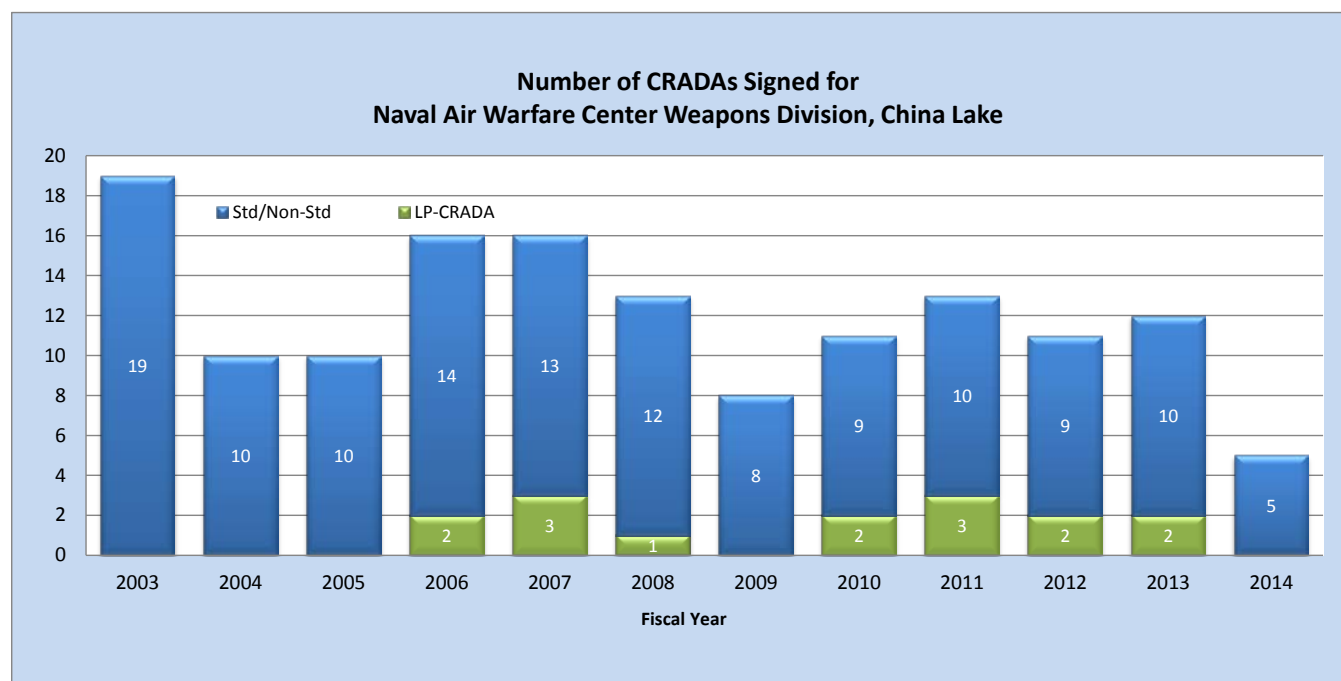
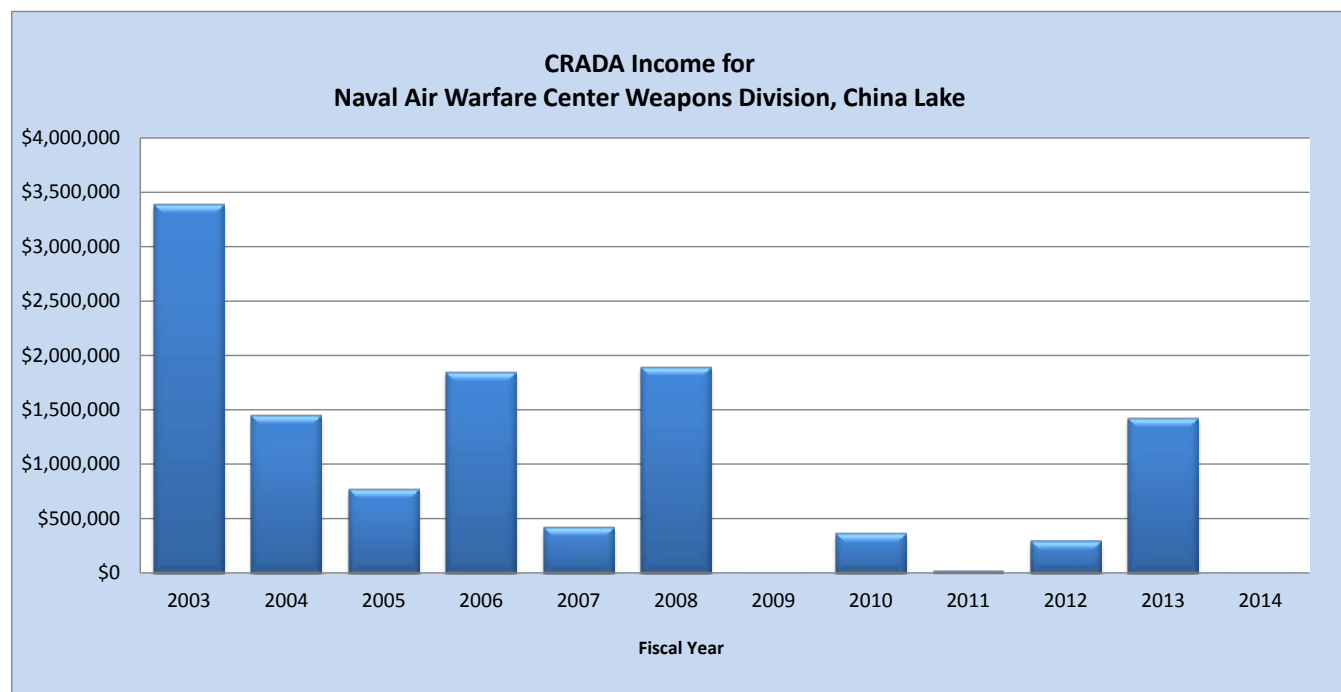


**CRADA History for
Naval Air Warfare Center Weapons Division, China Lake**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$18,738,151		100	-	100	100
2003	\$3,389,468		19	-	19	119
2004	\$1,446,923		10	-	10	129
2005	\$767,187		10	-	10	139
2006	\$1,848,877		14	2	16	155
2007	\$425,000		13	3	16	171
2008	\$1,895,000		12	1	13	184
2009	\$0		8	-	8	192
2010	\$365,000		9	2	11	203
2011	\$20,000		10	3	13	216
2012	\$290,000		9	2	11	227
2013	\$1,425,000		10	2	12	239
2014	\$0		5	-	5	244

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

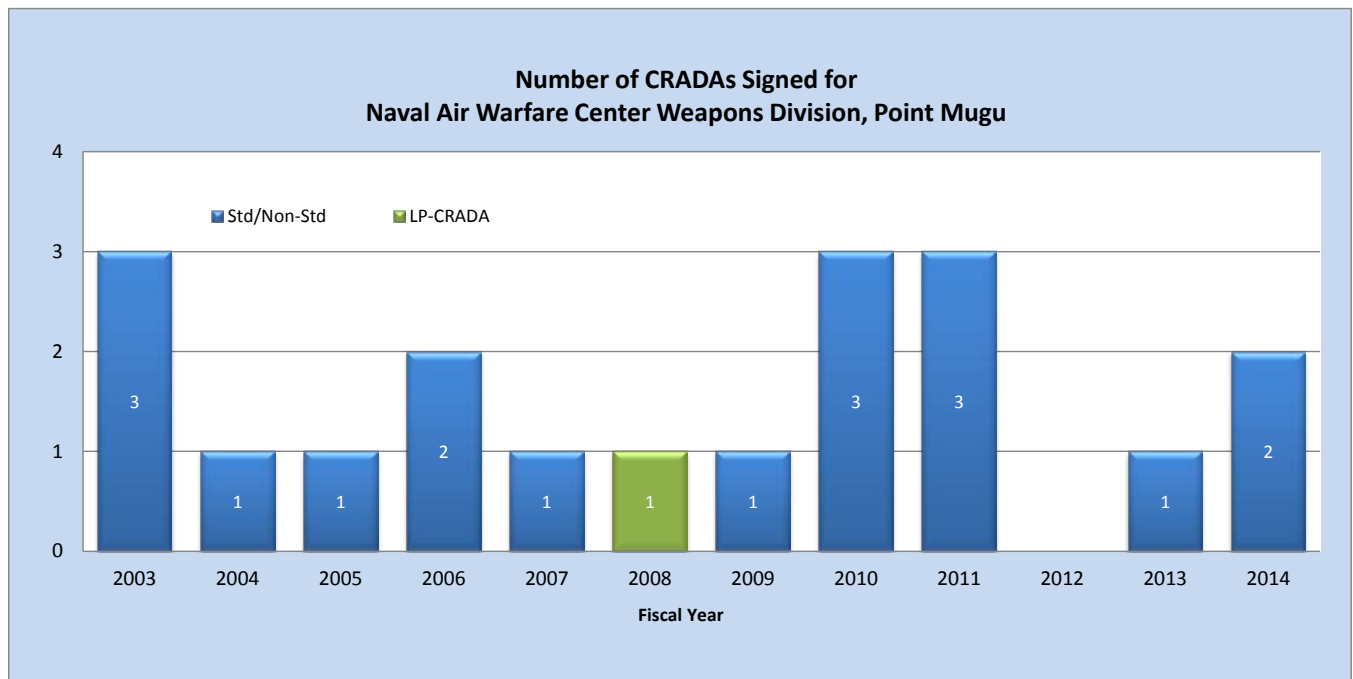
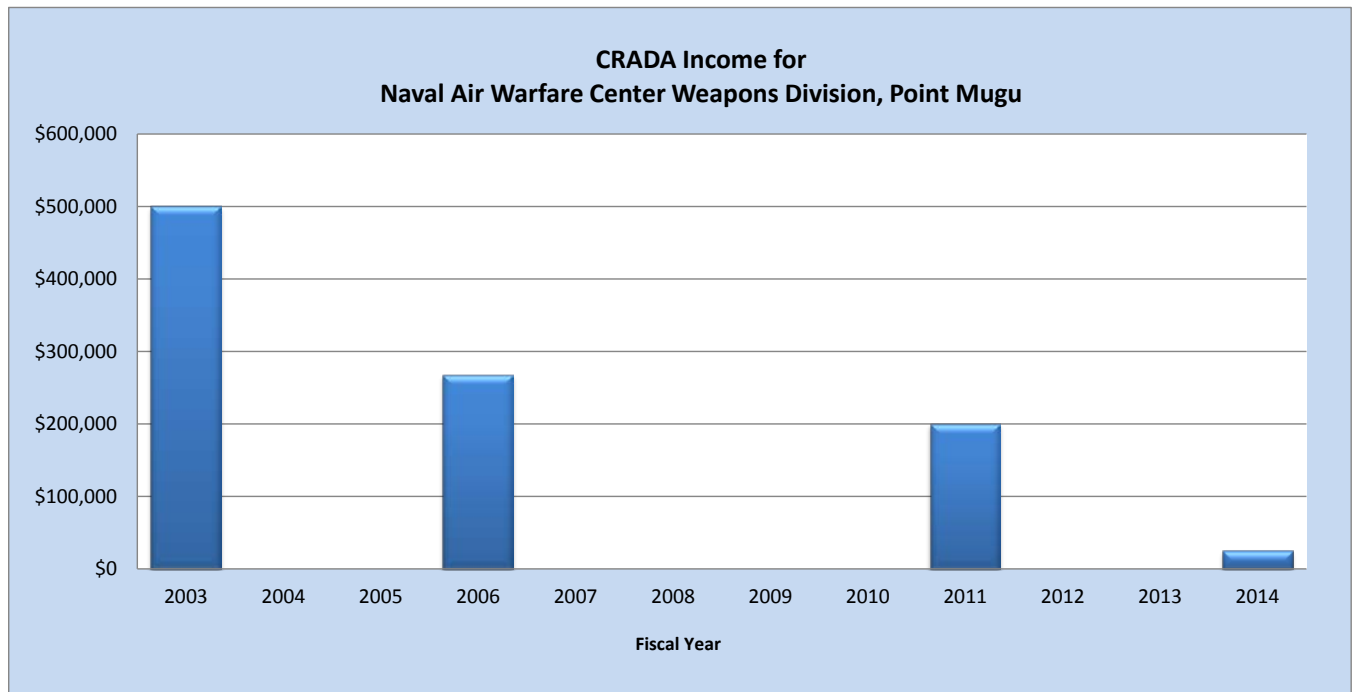


**CRADA History for
Naval Air Warfare Center Weapons Division, Point Mugu**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$1,878,000		29	3	32	32
2003	\$500,000		3	-	3	35
2004	\$0		1	-	1	36
2005	\$0		1	-	1	37
2006	\$267,337		2	-	2	39
2007	\$0		1	-	1	40
2008	\$0		-	1	1	41
2009	\$0		1	-	1	42
2010	\$0		3	-	3	45
2011	\$200,000		3	-	3	48
2012	\$0		-	-	-	48
2013	\$0		1	-	1	49
2014	\$25,000		2	-	2	51

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

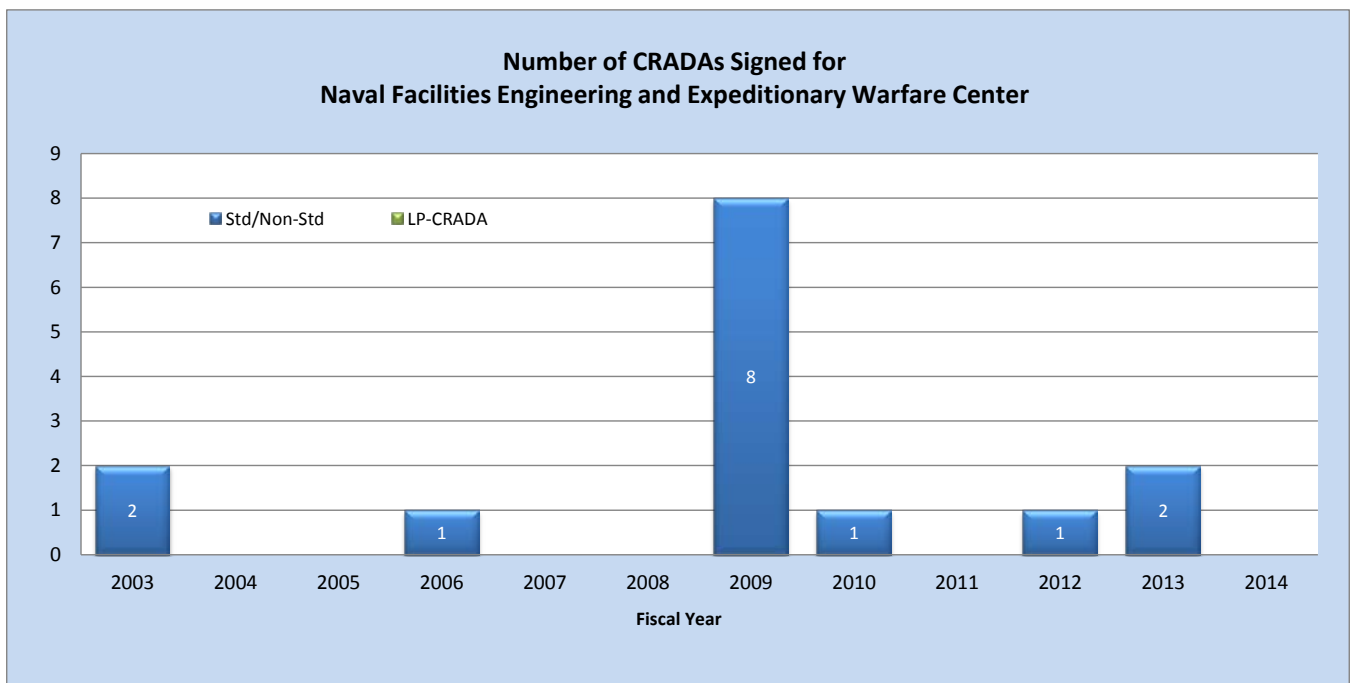
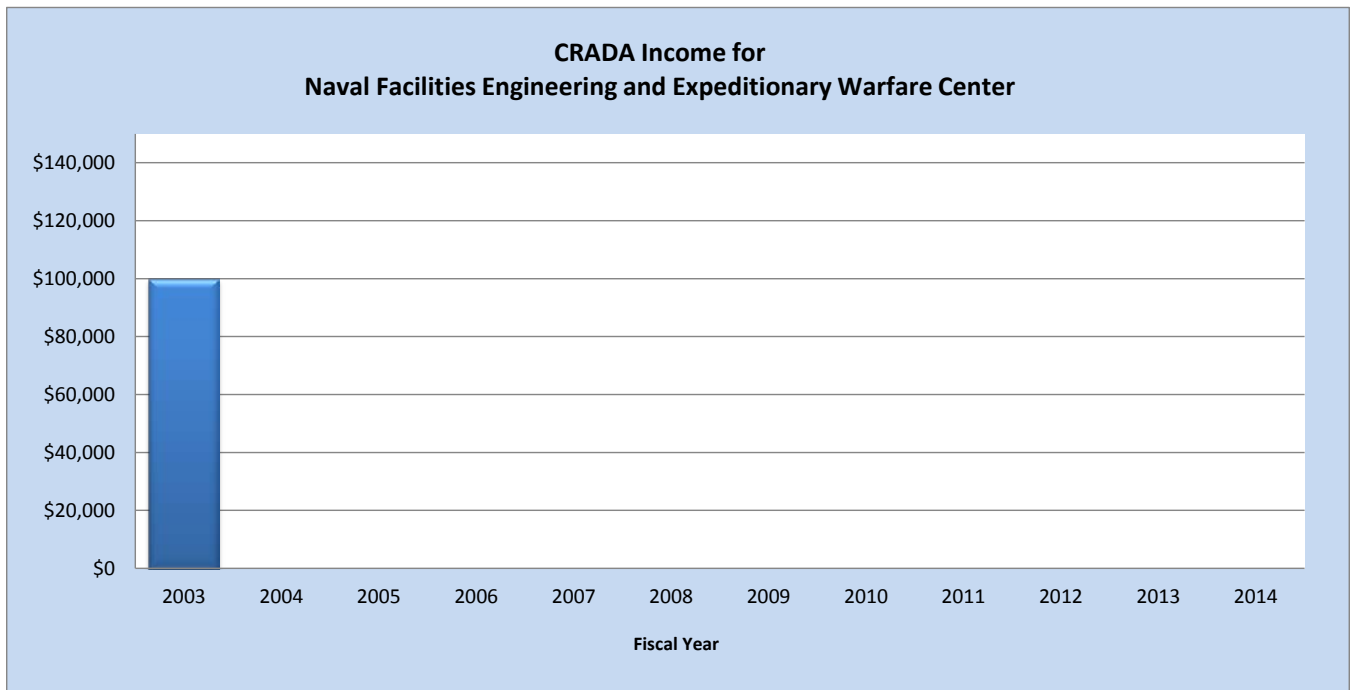


**CRADA History for
Naval Facilities Engineering and Expeditionary Warfare Center**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$395,000		12	-	12	12
2003	\$100,000		2	-	2	14
2004	\$0		-	-	-	14
2005	\$0		-	-	-	14
2006	\$0		1	-	1	15
2007	\$0		-	-	-	15
2008	\$0		-	-	-	15
2009	\$0		8	-	8	23
2010	\$0		1	-	1	24
2011	\$0		-	-	-	24
2012	\$0		1	-	1	25
2013	\$0		2	-	2	27
2014	\$0		-	-	-	27

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

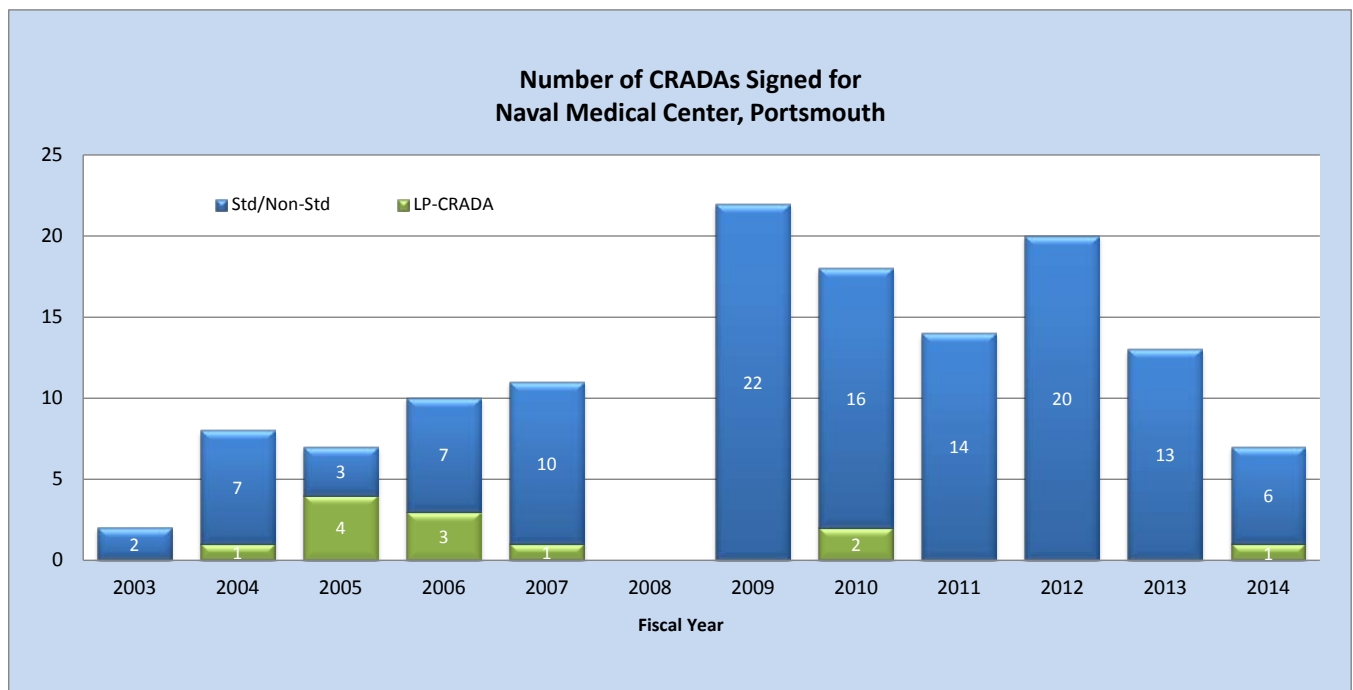
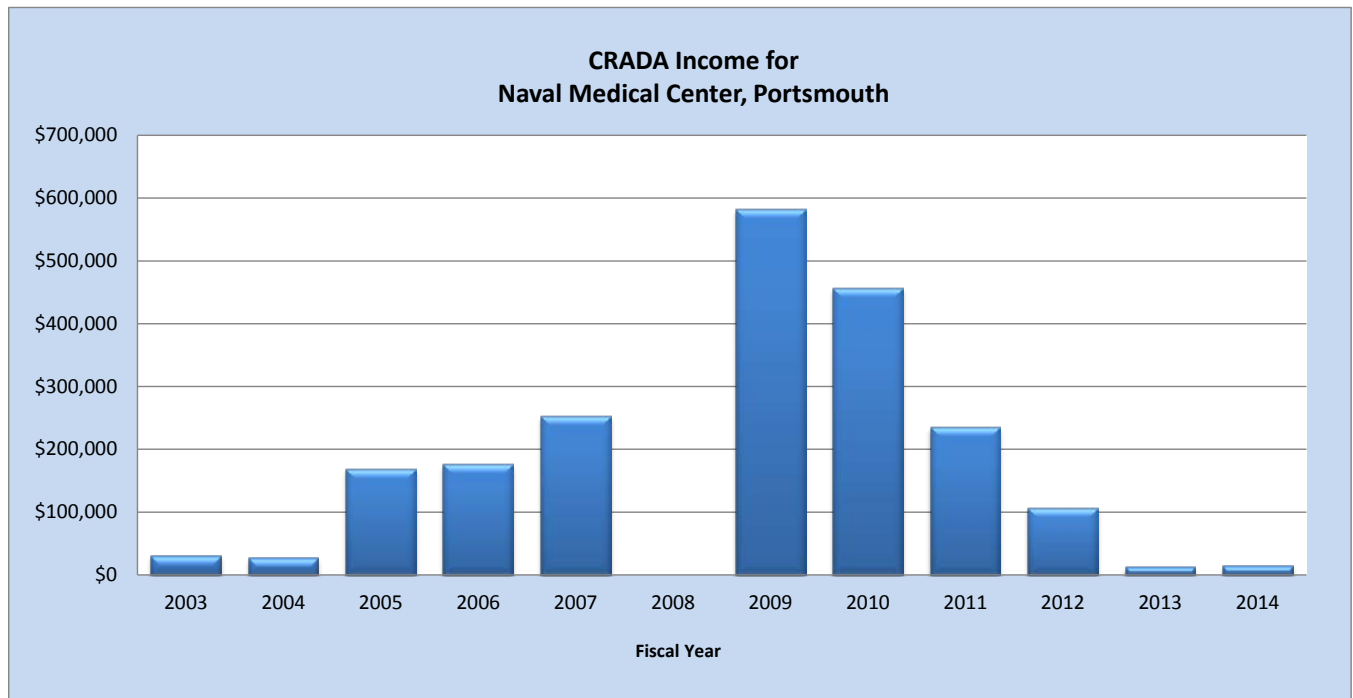


CRADA History for Naval Medical Center, Portsmouth

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$62,333		10	1	11	11
2003	\$30,000		2	-	2	13
2004	\$26,000		7	1	8	21
2005	\$169,200		3	4	7	28
2006	\$176,602		7	3	10	38
2007	\$252,590		10	1	11	49
2008	\$0		-	-	-	49
2009	\$582,523		22	-	22	71
2010	\$456,590		16	2	18	89
2011	\$235,194		14	-	14	103
2012	\$107,044		20	-	20	123
2013	\$12,500	\$9,000	13	-	13	136
2014	\$14,100		6	1	7	143

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

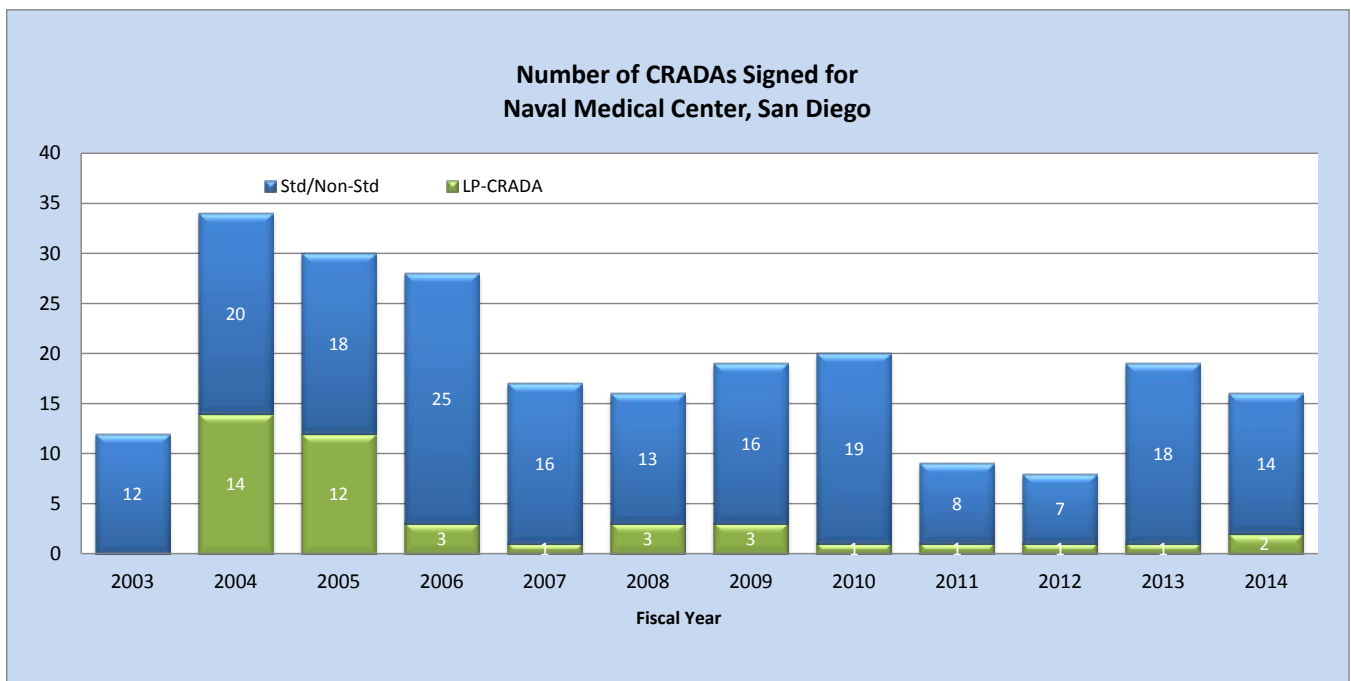
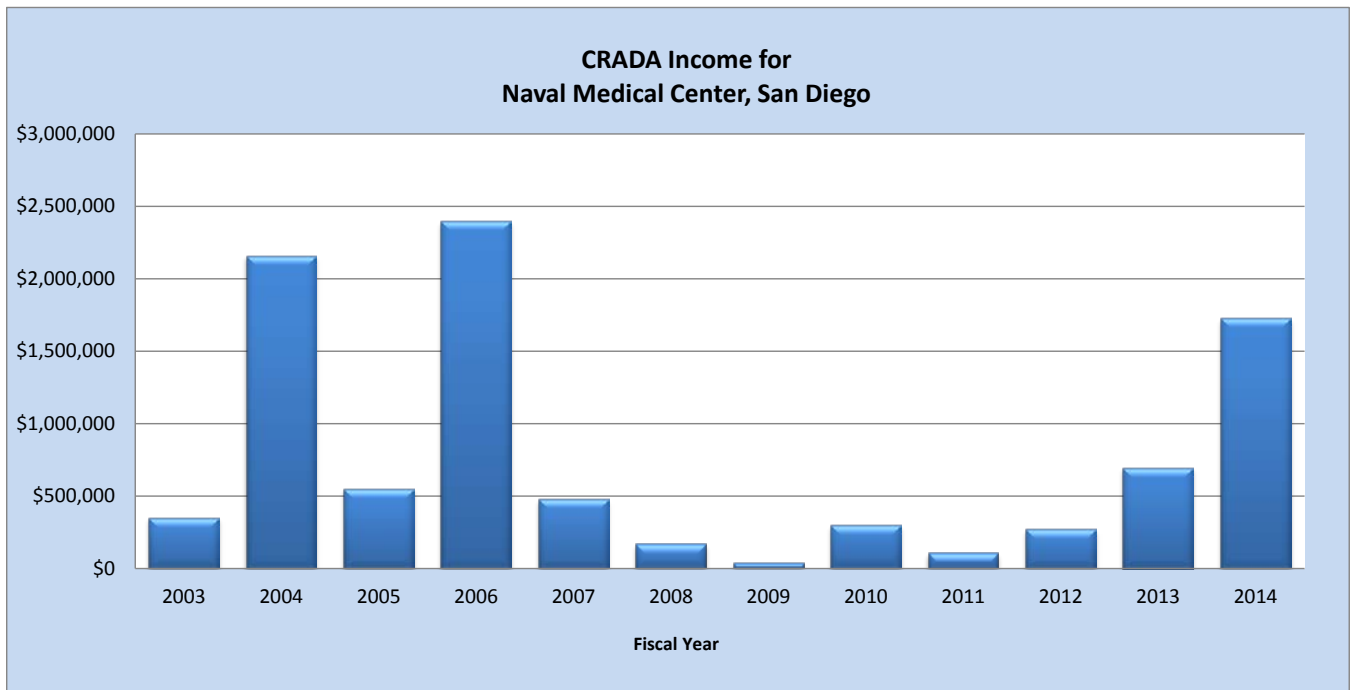


CRADA History for Naval Medical Center, San Diego

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$397,989		41	3	44	44
2003	\$351,155		12	-	12	56
2004	\$2,156,584		20	14	34	90
2005	\$550,133		18	12	30	120
2006	\$2,396,166		25	3	28	148
2007	\$475,537		16	1	17	165
2008	\$165,250		13	3	16	181
2009	\$37,832		16	3	19	200
2010	\$299,261		19	1	20	220
2011	\$103,193		8	1	9	229
2012	\$270,000	\$80,000	7	1	8	237
2013	\$695,691		18	1	19	256
2014	\$1,724,389		14	2	16	272

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

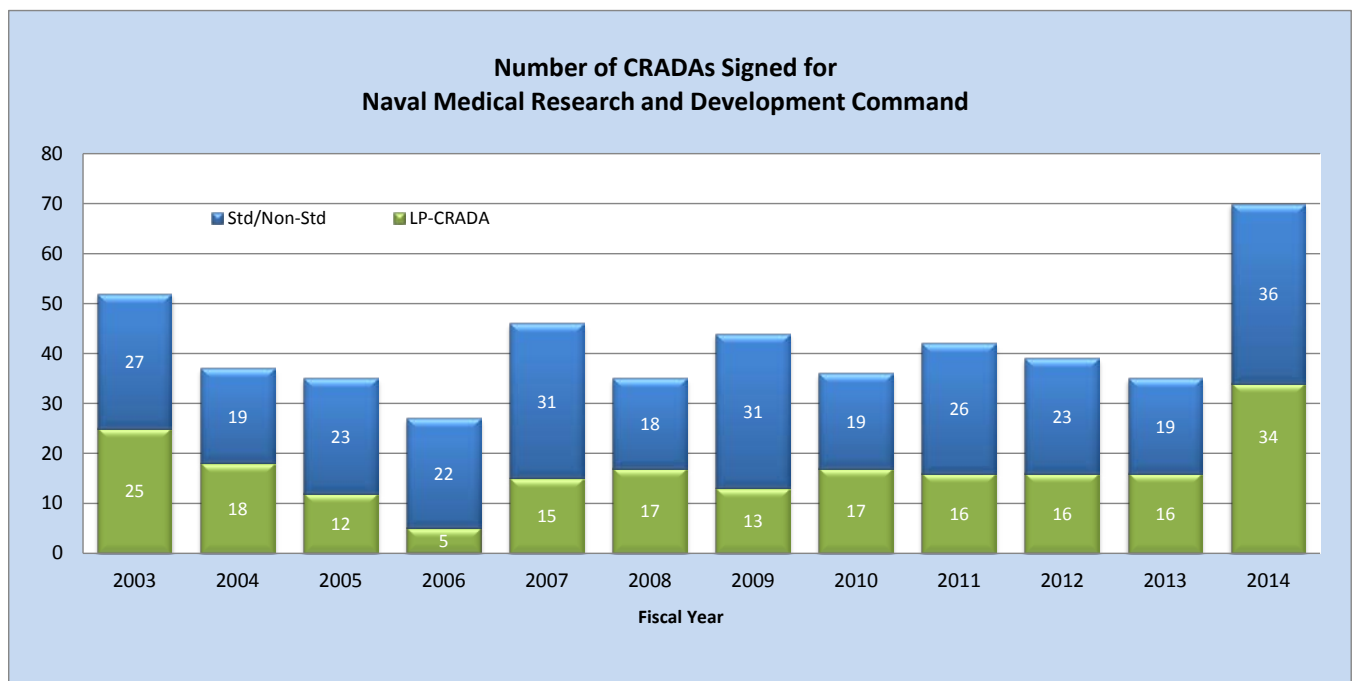
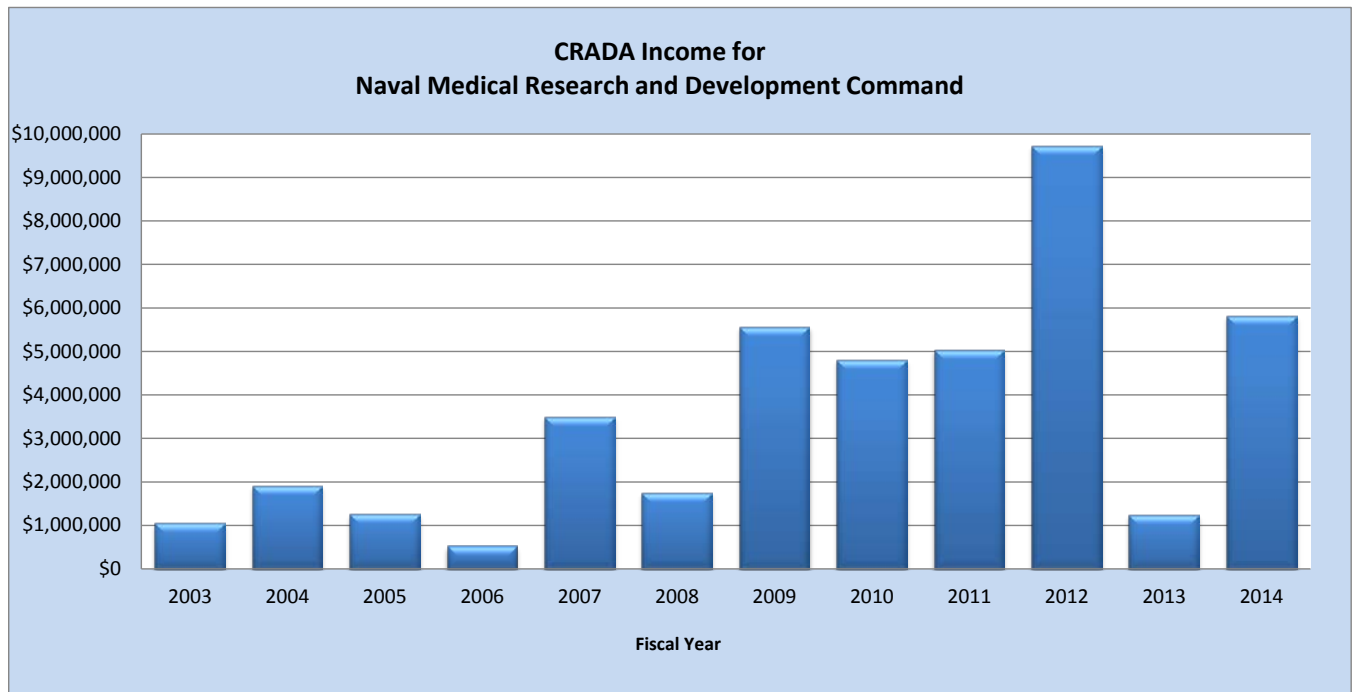


**CRADA History for
Naval Medical Research and Development Command**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$7,073,045		169	136	305	305
2003	\$1,046,923		27	25	52	357
2004	\$1,914,561		19	18	37	394
2005	\$1,261,177		23	12	35	429
2006	\$513,349		22	5	27	456
2007	\$3,499,070		31	15	46	502
2008	\$1,746,653		18	17	35	537
2009	\$5,565,582		31	13	44	581
2010	\$4,808,894		19	17	36	617
2011	\$5,031,585	\$1,468,635	26	16	42	659
2012	\$9,726,102	\$1,034,551	23	16	39	698
2013	\$1,246,909		19	16	35	733
2014	\$5,813,766	\$50,019	36	34	70	803

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

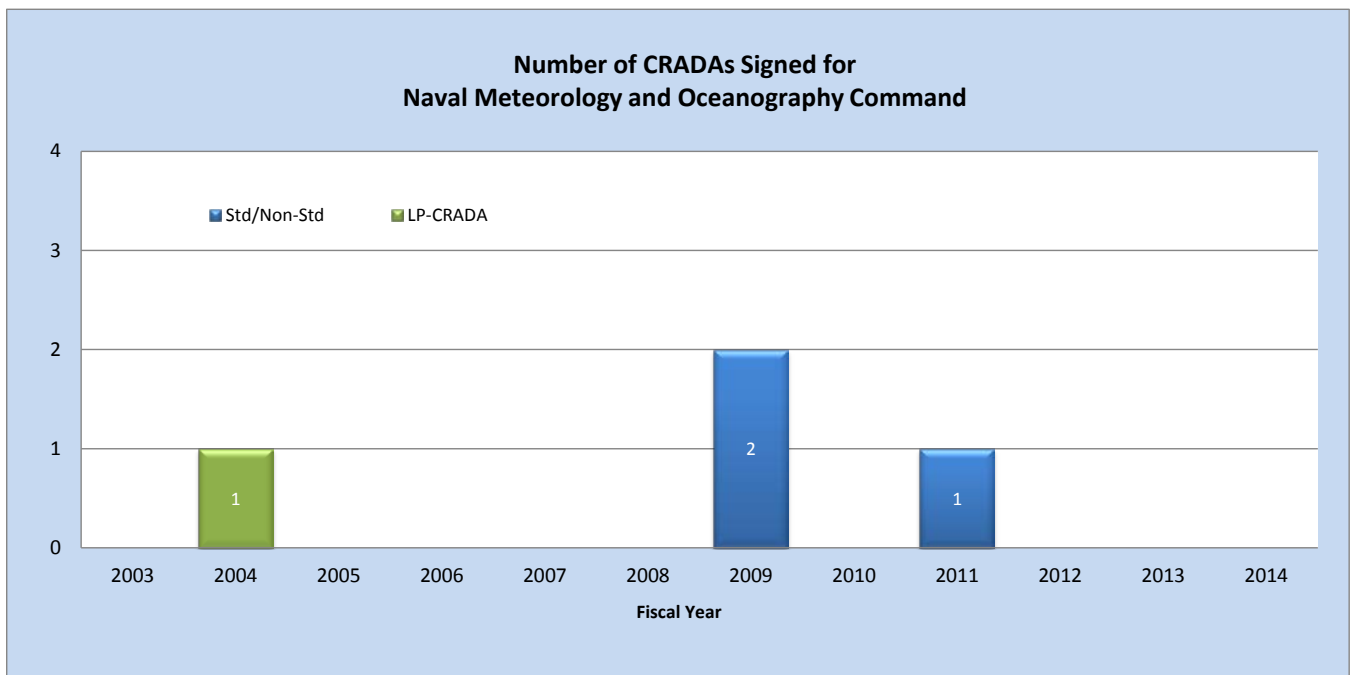
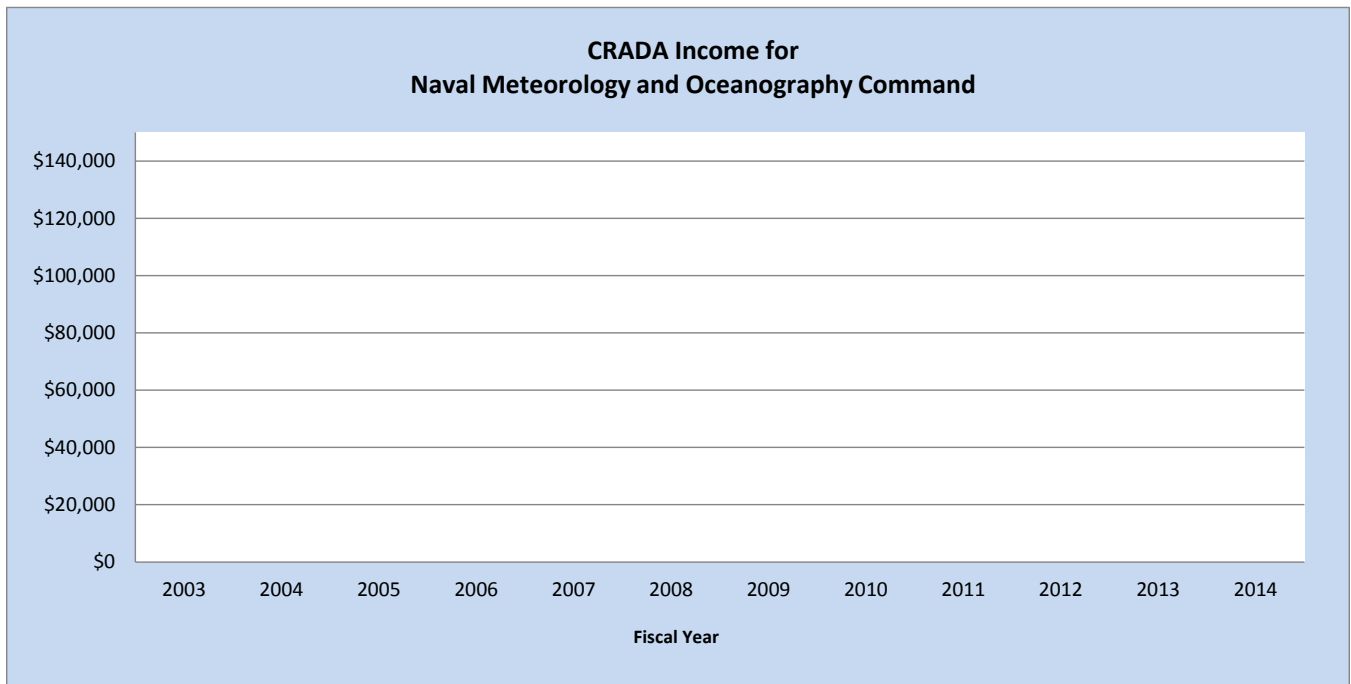


CRADA History for Naval Meteorology and Oceanography Command

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$134,500		10	6	16	16
2003	\$0		-	-	-	16
2004	\$0		-	1	1	17
2005	\$0		-	-	-	17
2006	\$0		-	-	-	17
2007	\$0		-	-	-	17
2008	\$0		-	-	-	17
2009	\$0		2	-	2	19
2010	\$0		-	-	-	19
2011	\$0		1	-	1	20
2012	\$0		-	-	-	20
2013	\$0		-	-	-	20
2014	\$0		-	-	-	20

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

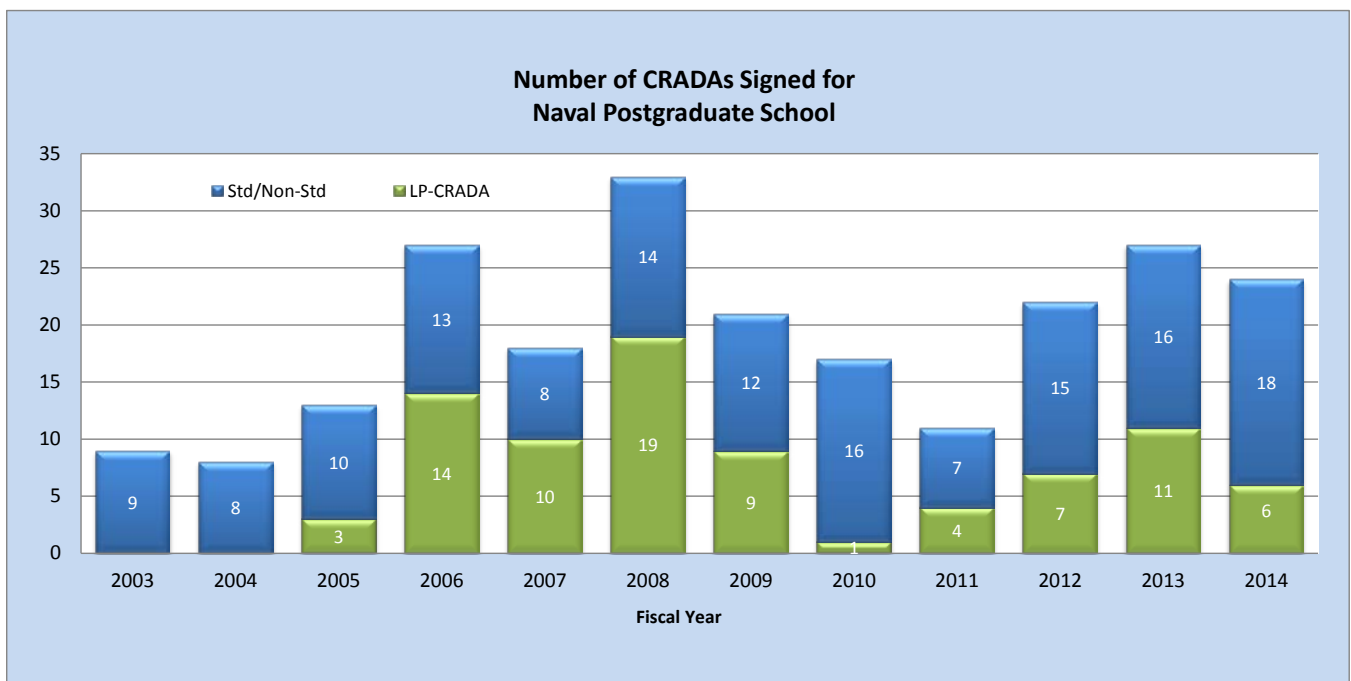
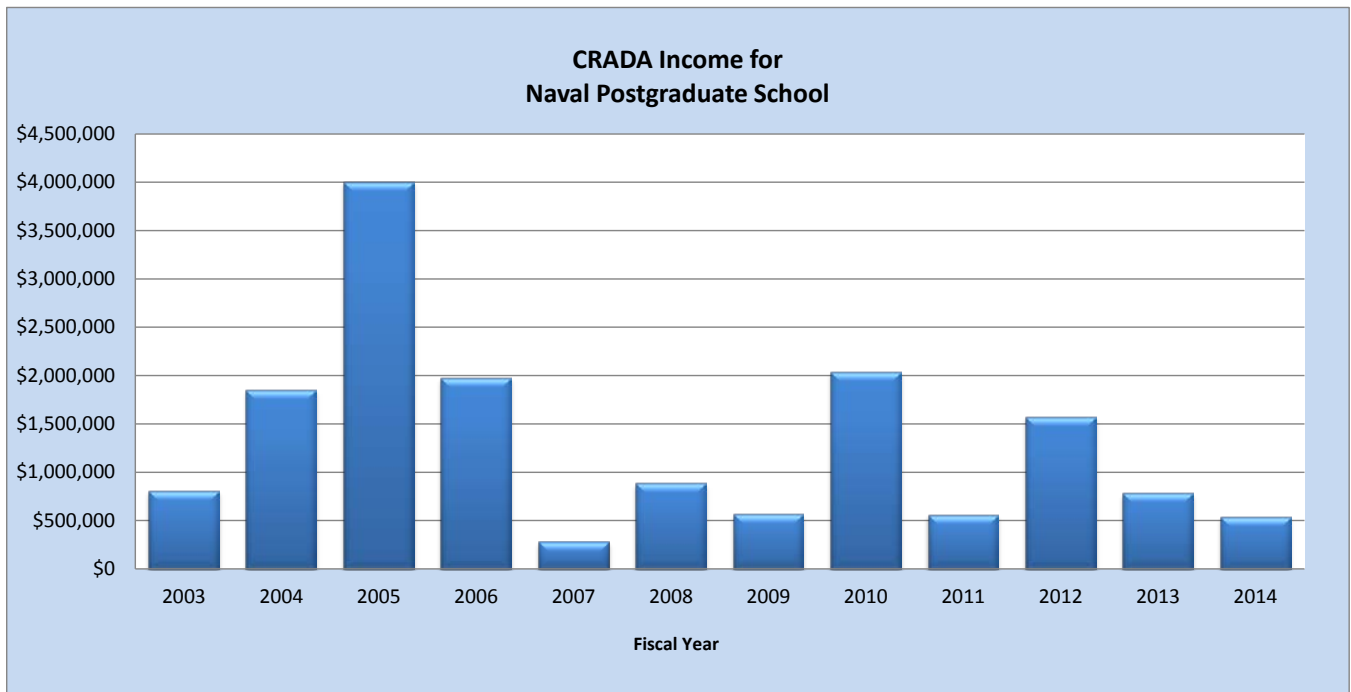


CRADA History for Naval Postgraduate School

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$5,343,925		38	-	38	38
2003	\$805,642		9	-	9	47
2004	\$1,853,567		8	-	8	55
2005	\$4,004,855	\$411,951	10	3	13	68
2006	\$1,976,311		13	14	27	95
2007	\$281,907		8	10	18	113
2008	\$887,399		14	19	33	146
2009	\$566,995		12	9	21	167
2010	\$2,036,811		16	1	17	184
2011	\$557,257		7	4	11	195
2012	\$1,573,746	\$183,456	15	7	22	217
2013	\$782,713		16	11	27	244
2014	\$541,000		18	6	24	268

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

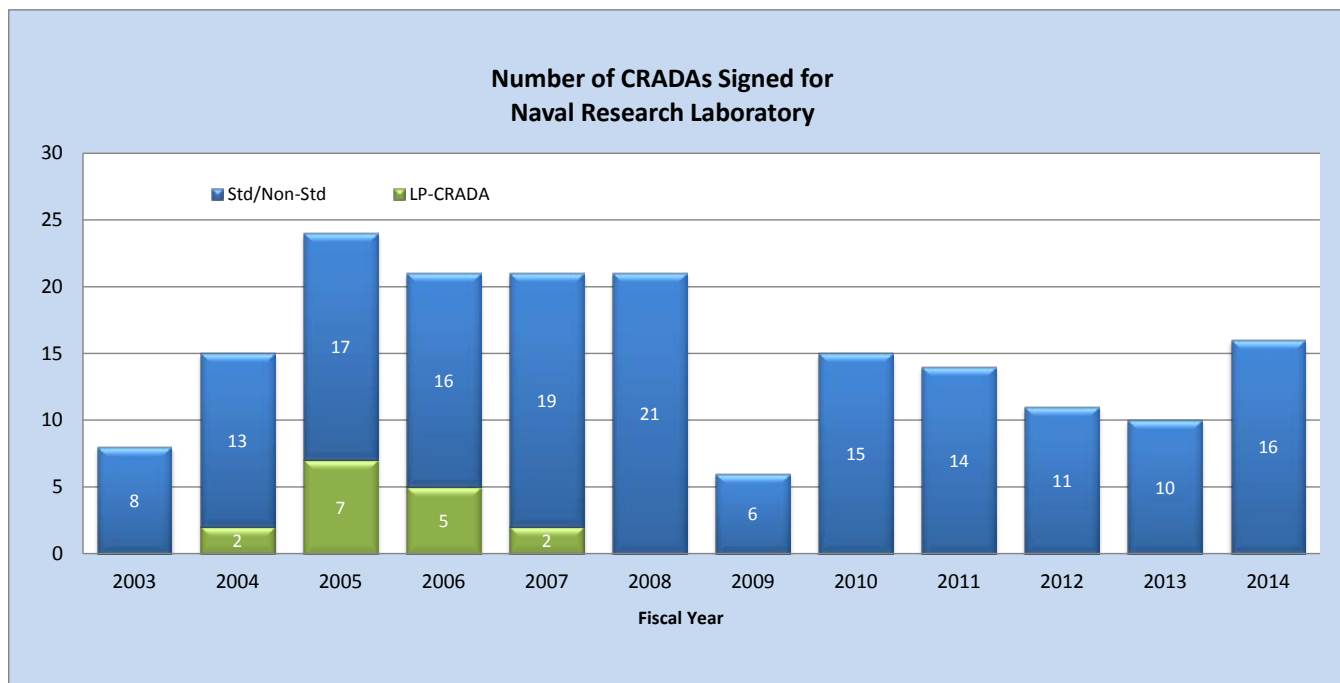
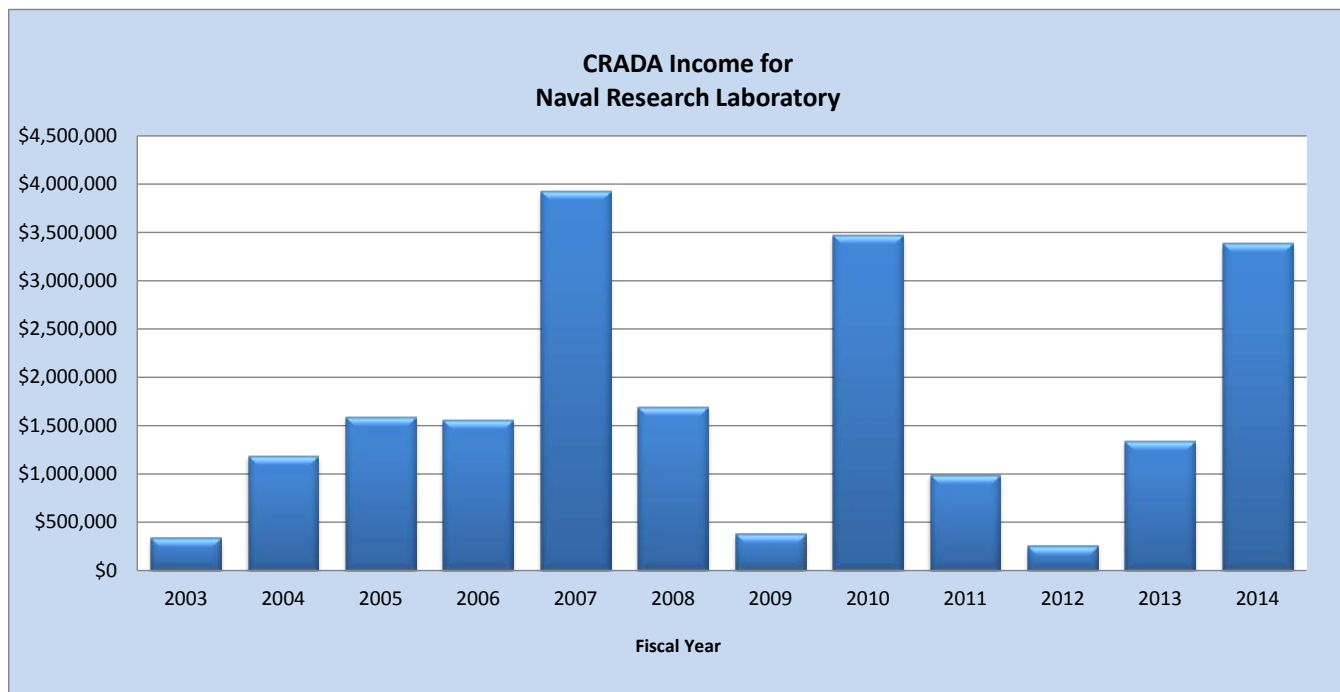


CRADA History for Naval Research Laboratory

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$15,399,318		234	39	273	273
2003	\$334,500		8	-	8	281
2004	\$1,187,050		13	2	15	296
2005	\$1,590,640		17	7	24	320
2006	\$1,557,382		16	5	21	341
2007	\$3,928,068		19	2	21	362
2008	\$1,691,238		21	-	21	383
2009	\$371,000		6	-	6	389
2010	\$3,477,067		15	-	15	404
2011	\$990,815		14	-	14	418
2012	\$246,850		11	-	11	429
2013	\$1,336,986	\$69,959	10	-	10	439
2014	\$3,385,816	\$55,000	16	-	16	455

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

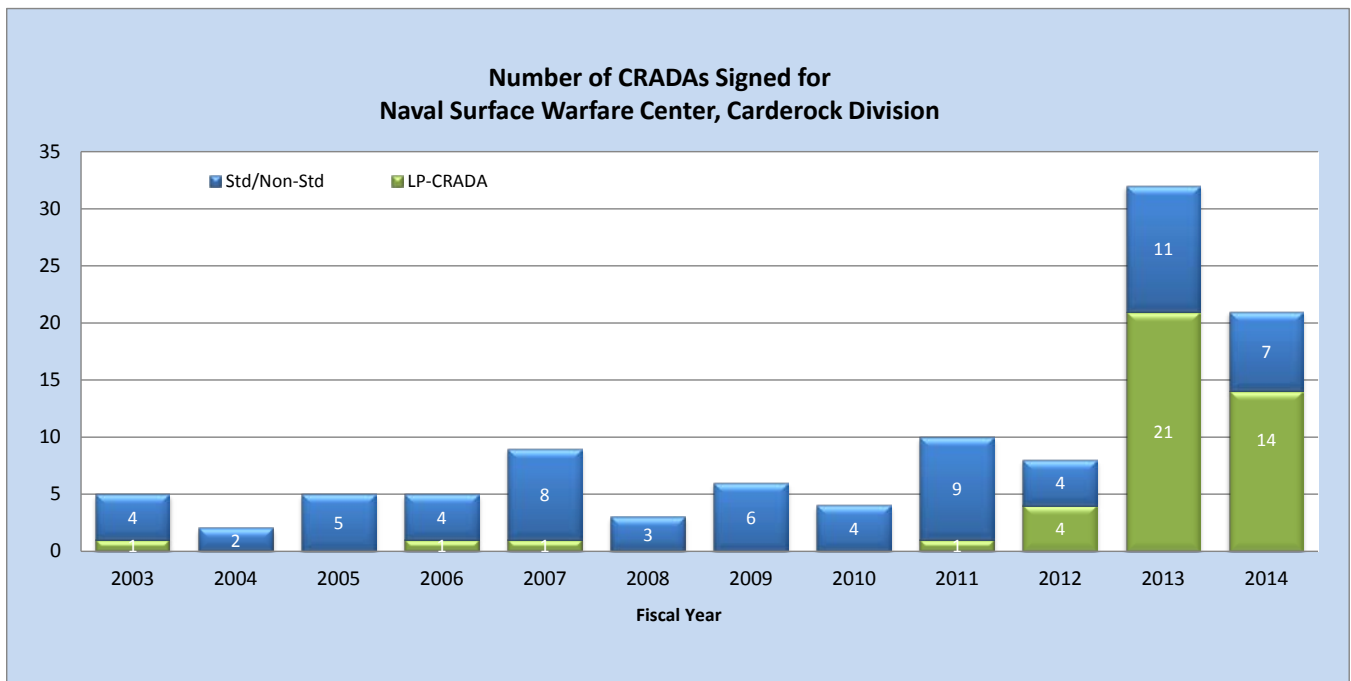
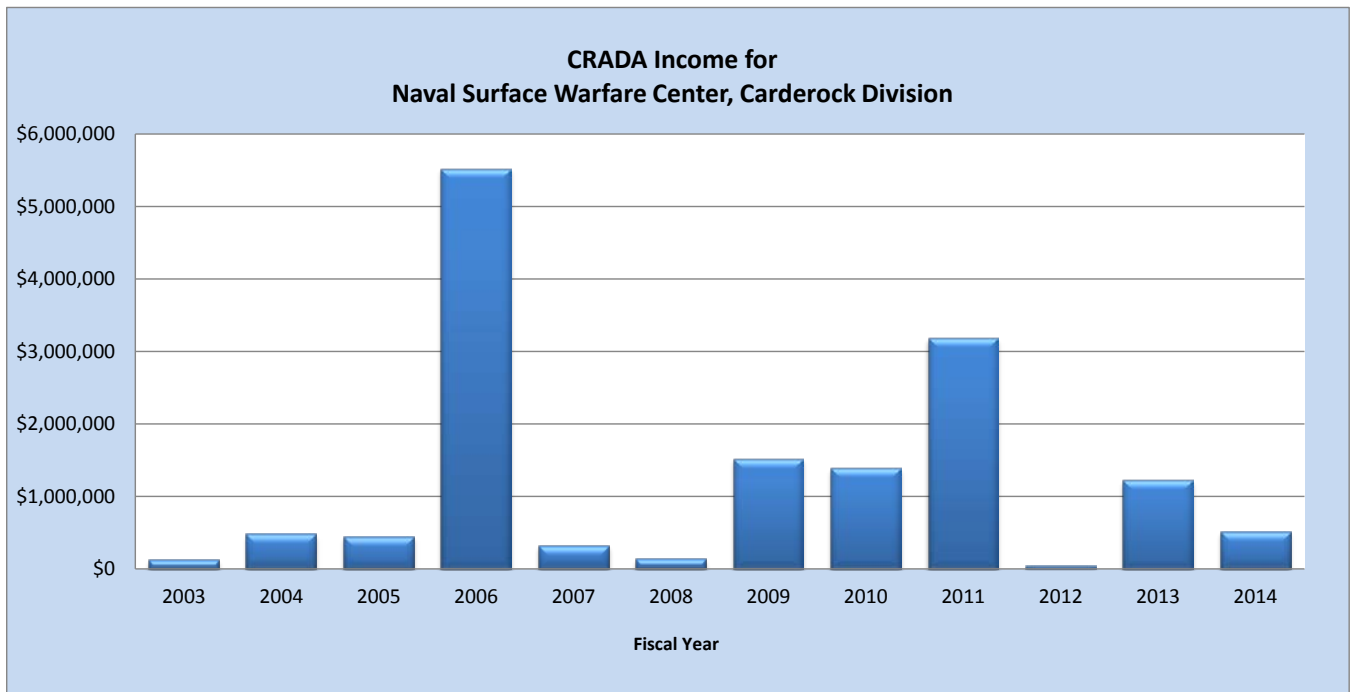


**CRADA History for
Naval Surface Warfare Center, Carderock Division**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$1,780,625		37	15	52	52
2003	\$119,000		4	1	5	57
2004	\$476,000		2	-	2	59
2005	\$439,848		5	-	5	64
2006	\$5,516,000		4	1	5	69
2007	\$316,500		8	1	9	78
2008	\$132,100		3	-	3	81
2009	\$1,518,497		6	-	6	87
2010	\$1,387,700		4	-	4	91
2011	\$3,182,384		9	1	10	101
2012	\$35,000		4	4	8	109
2013	\$1,221,800	\$9,000	11	21	32	141
2014	\$507,000		7	14	21	162

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

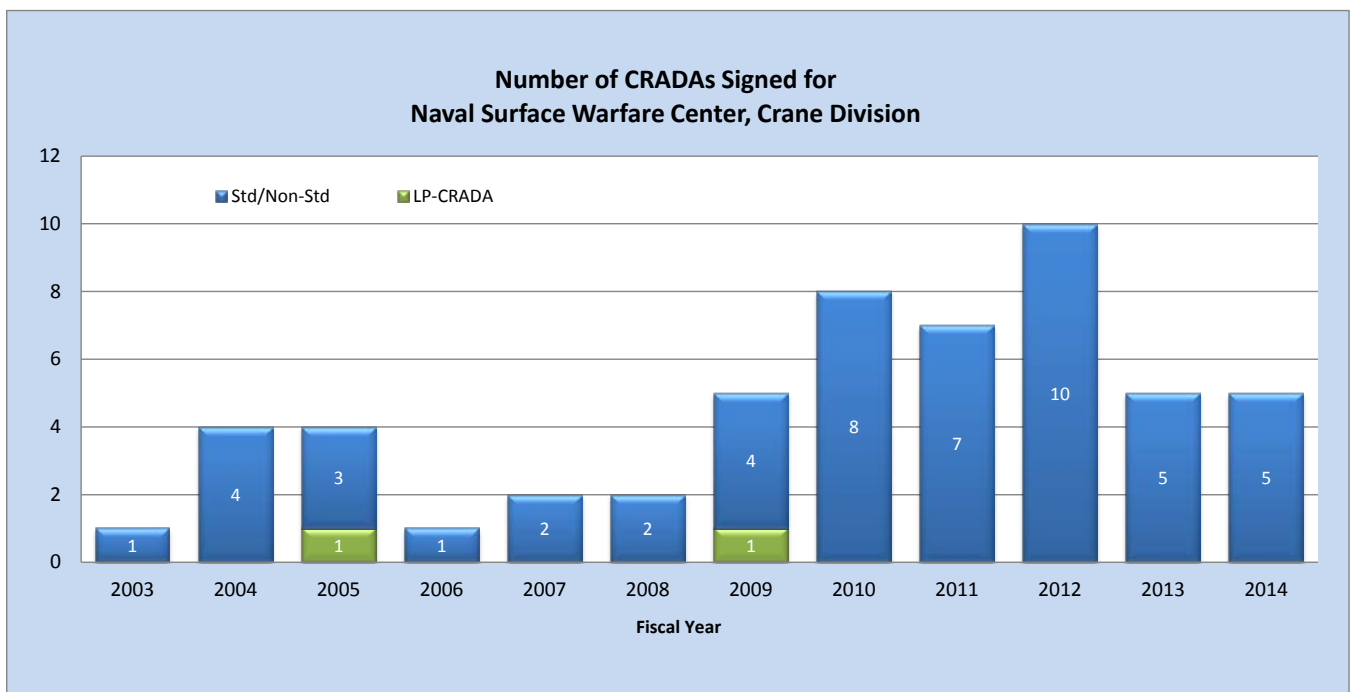
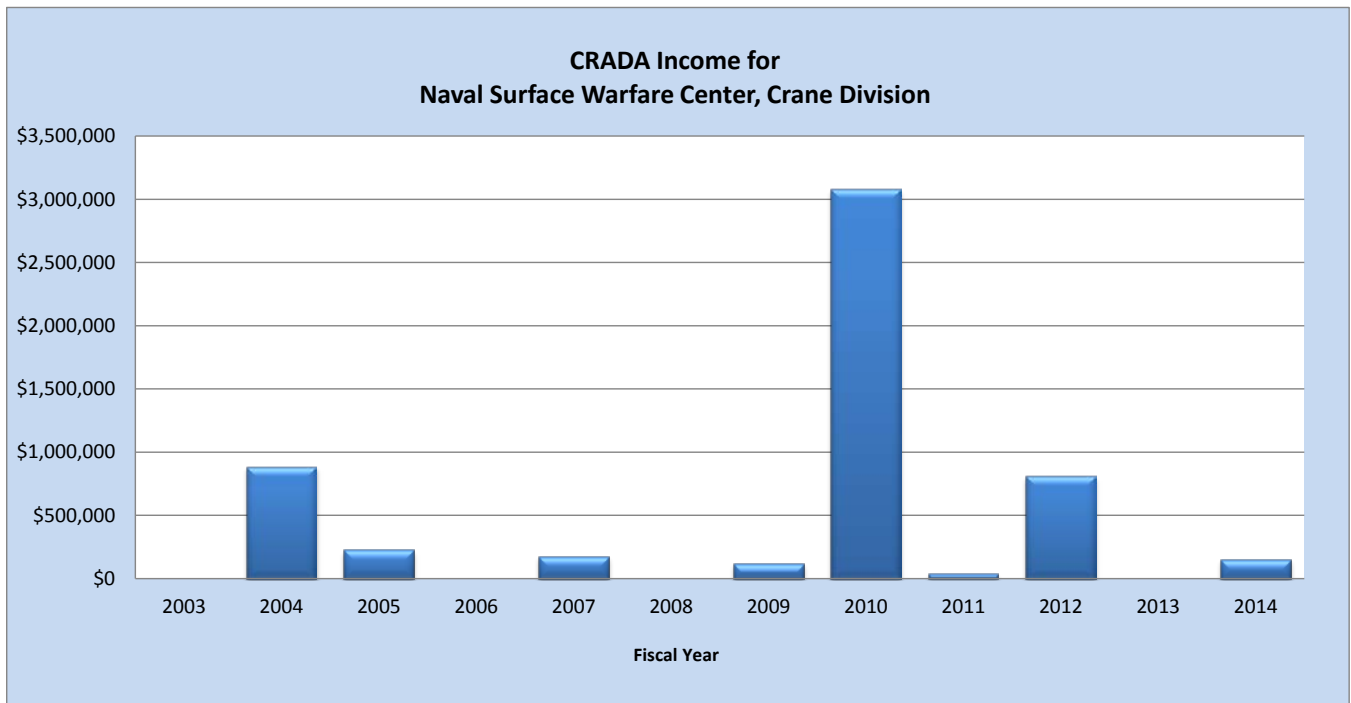


**CRADA History for
Naval Surface Warfare Center, Crane Division**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$2,670,300		20	27	47	47
2003	\$0		1	-	1	48
2004	\$883,000		4	-	4	52
2005	\$224,000		3	1	4	56
2006	\$0		1	-	1	57
2007	\$175,000		2	-	2	59
2008	\$0		2	-	2	61
2009	\$114,912		4	1	5	66
2010	\$3,078,633		8	-	8	74
2011	\$37,200		7	-	7	81
2012	\$810,108	\$3,663	10	-	10	91
2013	\$0		5	-	5	96
2014	\$150,000		5	-	5	101

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

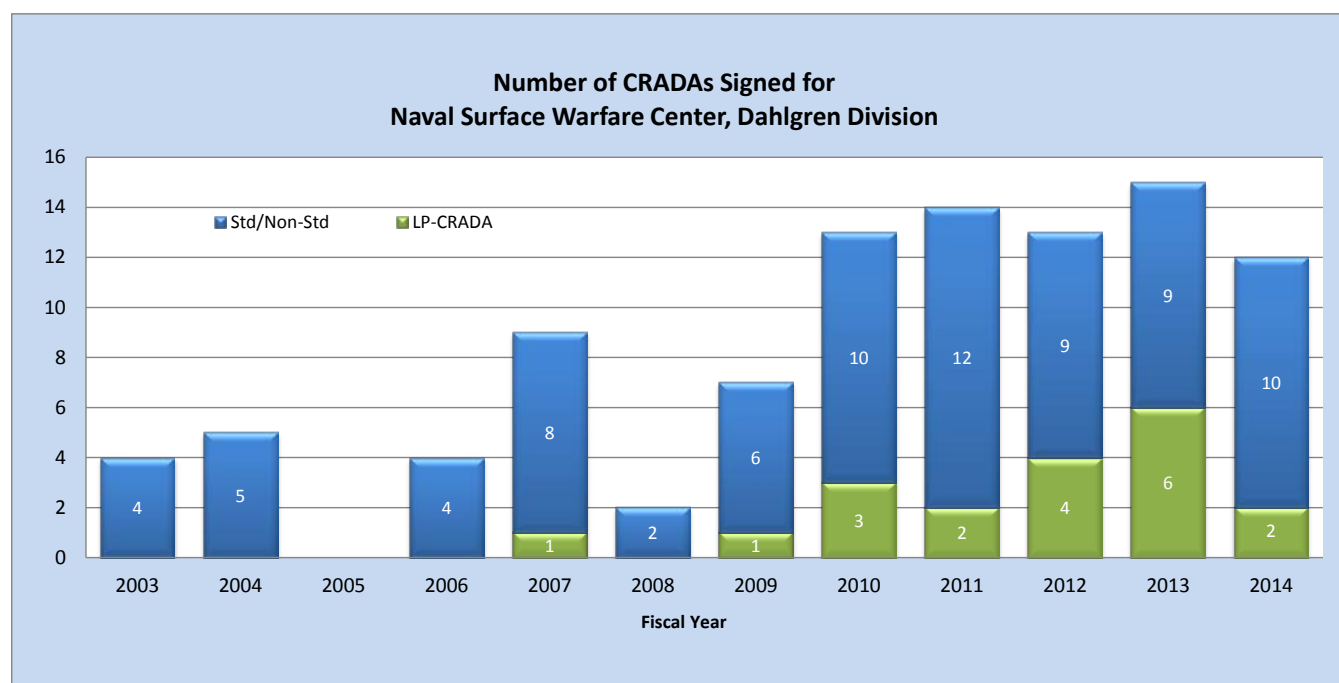
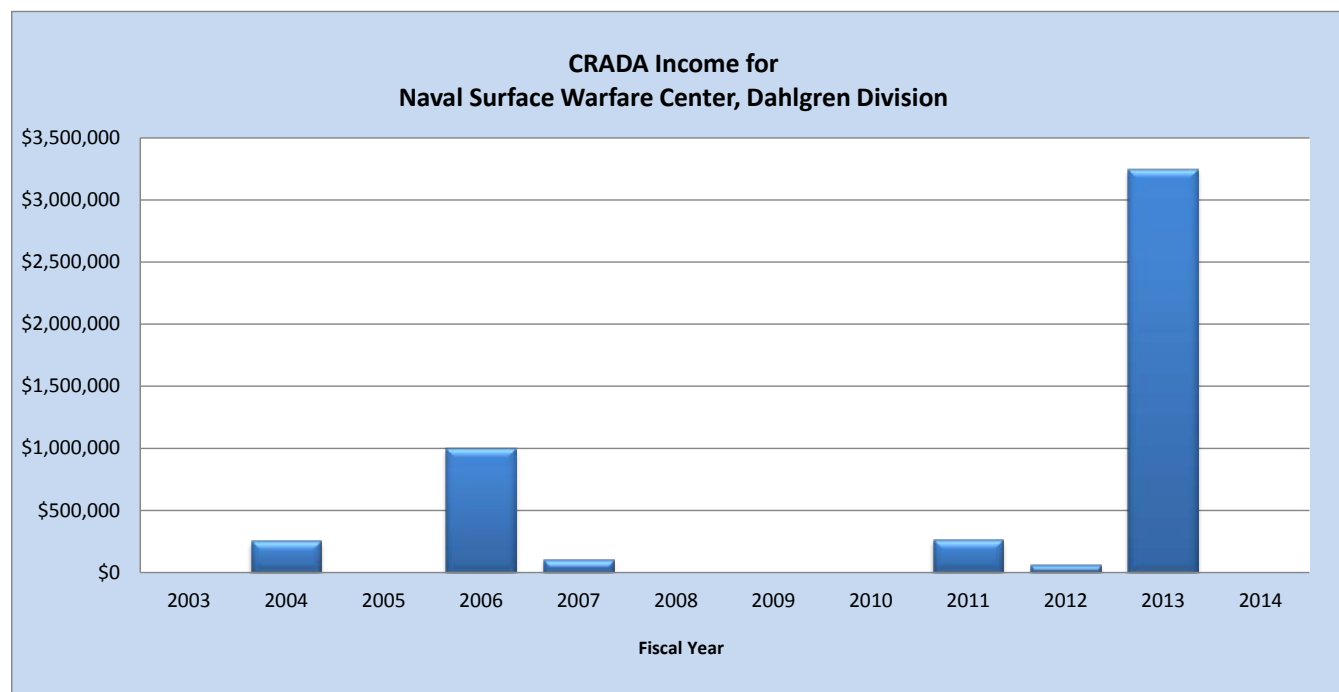


**CRADA History for
Naval Surface Warfare Center, Dahlgren Division**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$1,235,477		56	1	57	57
2003	\$0		4	-	4	61
2004	\$250,000		5	-	5	66
2005	\$0		-	-	-	66
2006	\$1,000,000		4	-	4	70
2007	\$100,000		8	1	9	79
2008	\$0		2	-	2	81
2009	\$0		6	1	7	88
2010	\$0		10	3	13	101
2011	\$260,921		12	2	14	115
2012	\$56,337		9	4	13	128
2013	\$3,246,344	\$622,451	9	6	15	143
2014	\$0		10	2	12	155

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.



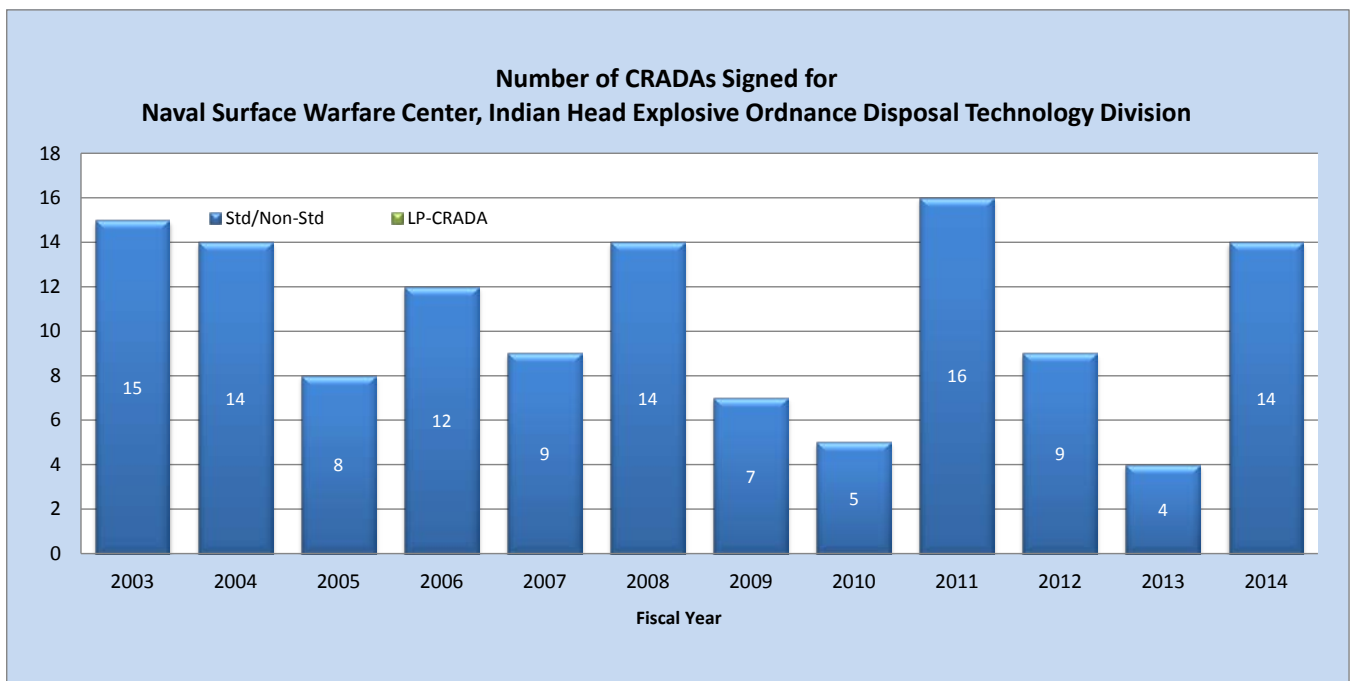
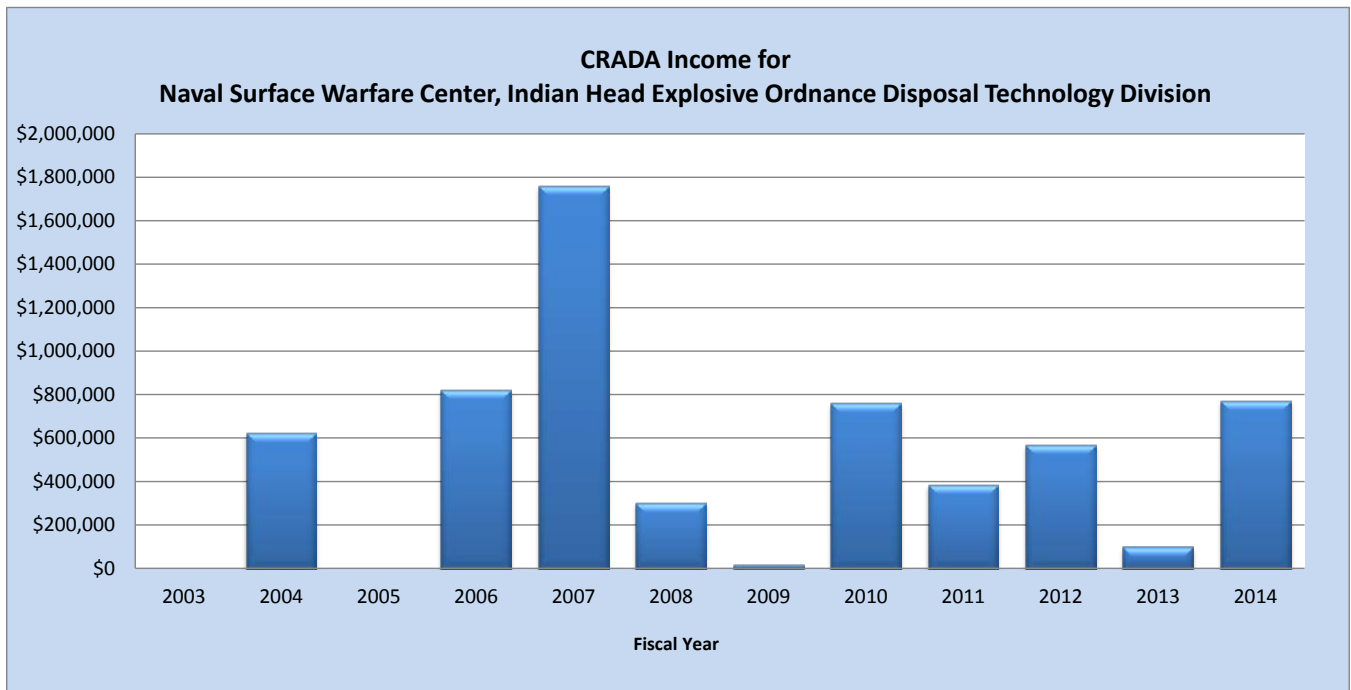
**CRADA History for
Naval Surface Warfare Center,
Indian Head Explosive Ordnance Disposal Technology Division**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$639,300		44	4	48	48
2003	\$0		15	-	15	63
2004	\$622,000		14	-	14	77
2005	\$0		8	-	8	85
2006	\$822,350		12	-	12	97
2007	\$1,761,340		9	-	9	106
2008	\$300,632		14	-	14	120
2009	\$15,000		7	-	7	127
2010	\$760,000		5	-	5	132
2011	\$385,107		16	-	16	148
2012	\$567,944	\$136,000	9	-	9	157
2013	\$98,000		4	-	4	161
2014	\$770,600	\$20,000	14	-	14	175

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

NOTE: As of February 28, 2013, NAVSEA directed, and the Secretary of the Navy approved, the merger of the Naval Surface Warfare Center, Indian Head Division (NSWC IHD) and the Naval Explosive Ordnance Disposal Technology Division (EODTECHDIV). These two organizations will form the Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division (NSWC IHEODTECHDIV). The new Command, NSWC IHEODTECHDIV, retains the mission, functions, and technical capabilities of both organizations.

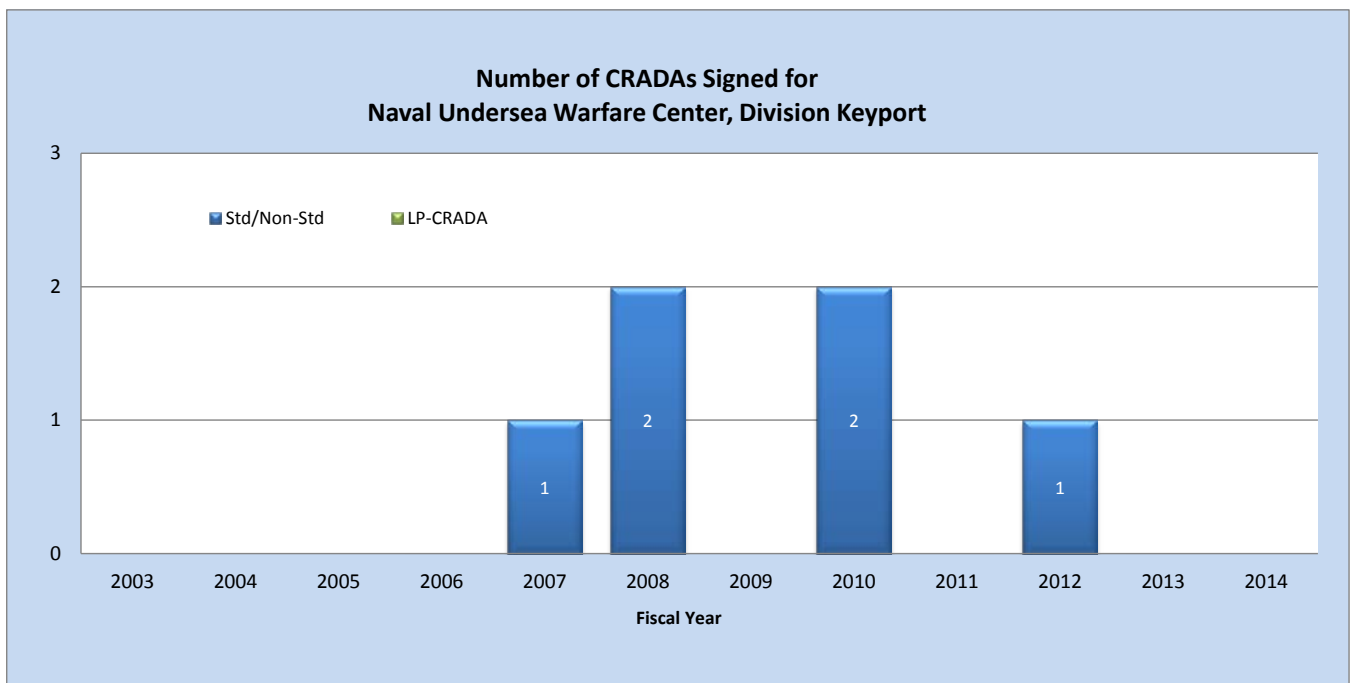
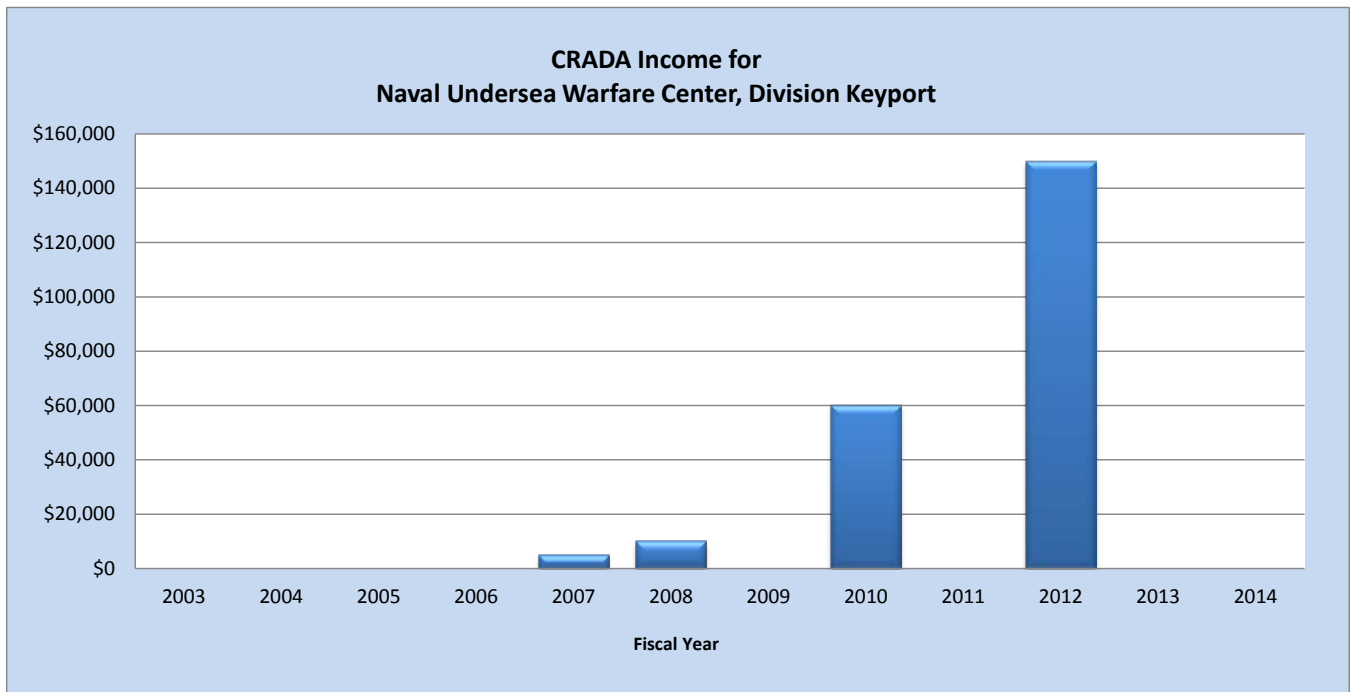


**CRADA History for
Naval Undersea Warfare Center, Division Keyport**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$0		5	1	6	6
2003	\$0		-	-	-	6
2004	\$0		-	-	-	6
2005	\$0		-	-	-	6
2006	\$0		-	-	-	6
2007	\$5,000		1	-	1	7
2008	\$10,000		2	-	2	9
2009	\$0		-	-	-	9
2010	\$60,300		2	-	2	11
2011	\$0		-	-	-	11
2012	\$150,000		1	-	1	12
2013	\$0		-	-	-	12
2014	\$0		-	-	-	12

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

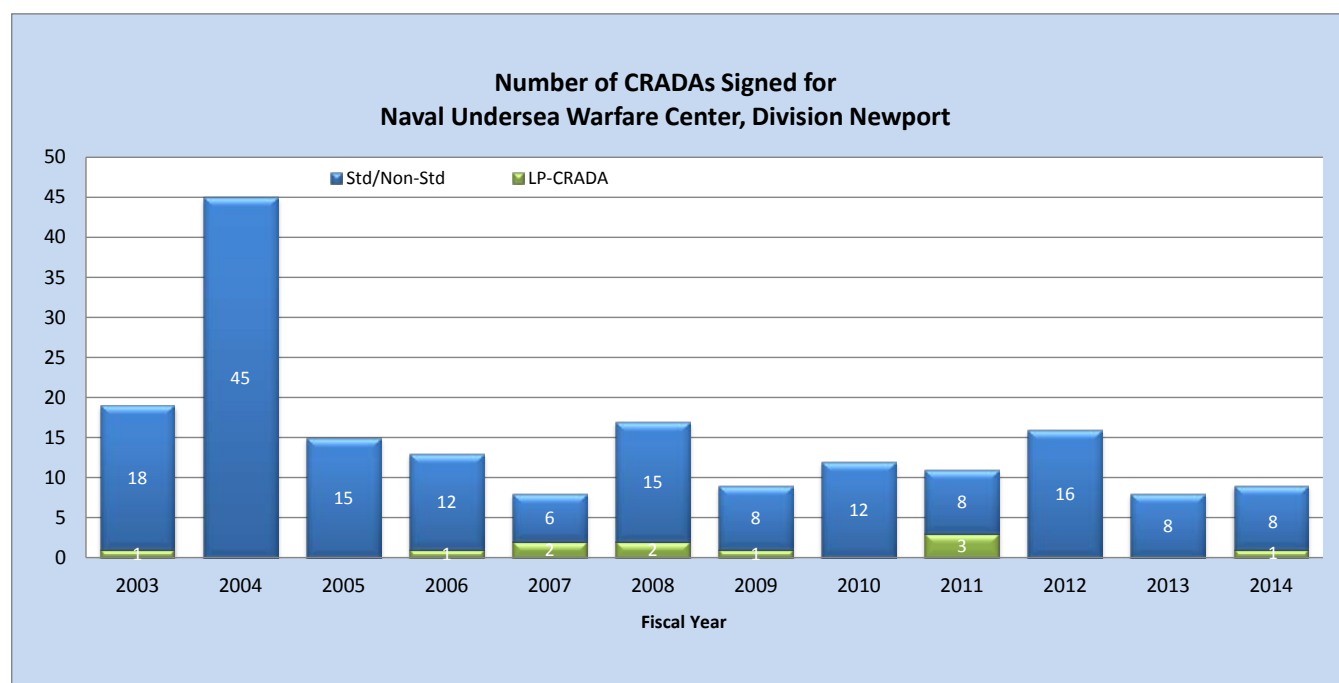
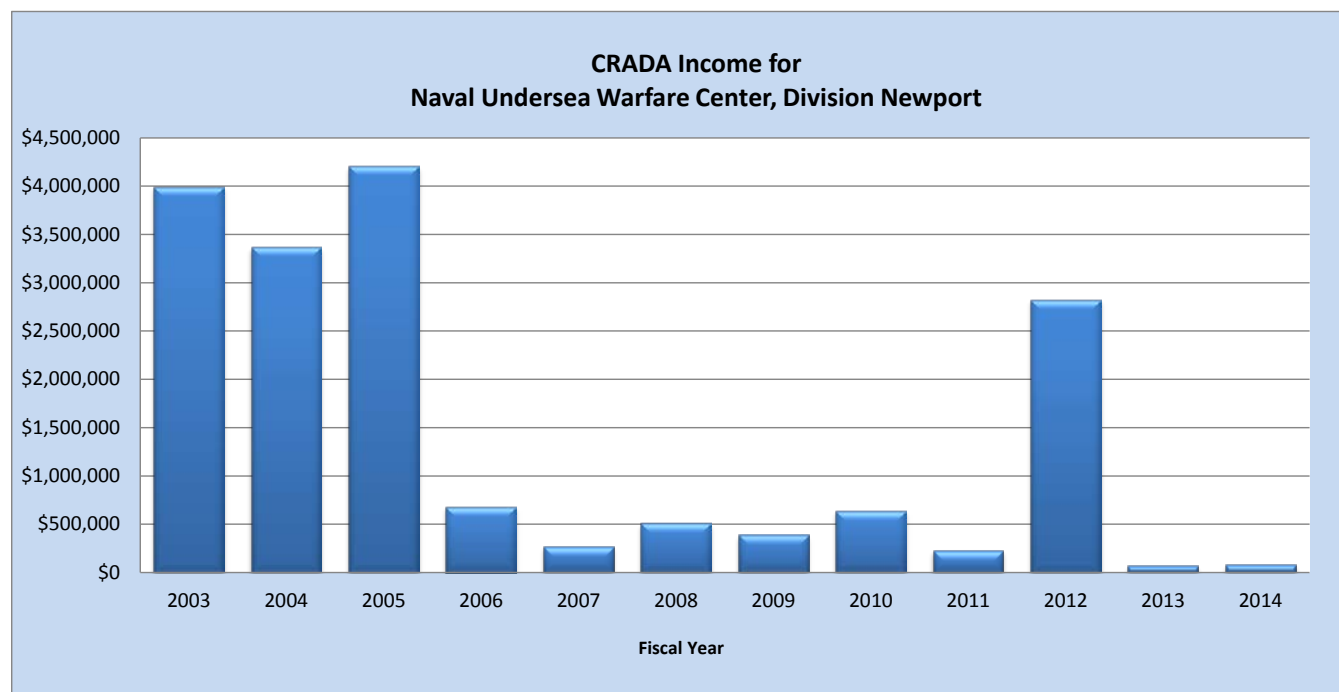


**CRADA History for
Naval Undersea Warfare Center, Division Newport**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$1,636,487		72	7	79	79
2003	\$3,994,084		18	1	19	98
2004	\$3,363,467		45	-	45	143
2005	\$4,204,095		15	-	15	158
2006	\$678,400		12	1	13	171
2007	\$265,000		6	2	8	179
2008	\$505,907		15	2	17	196
2009	\$384,500		8	1	9	205
2010	\$638,898		12	-	12	217
2011	\$226,500		8	3	11	228
2012	\$2,819,629	\$282,000	16	-	16	244
2013	\$62,000		8	-	8	252
2014	\$75,000		8	1	9	261

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

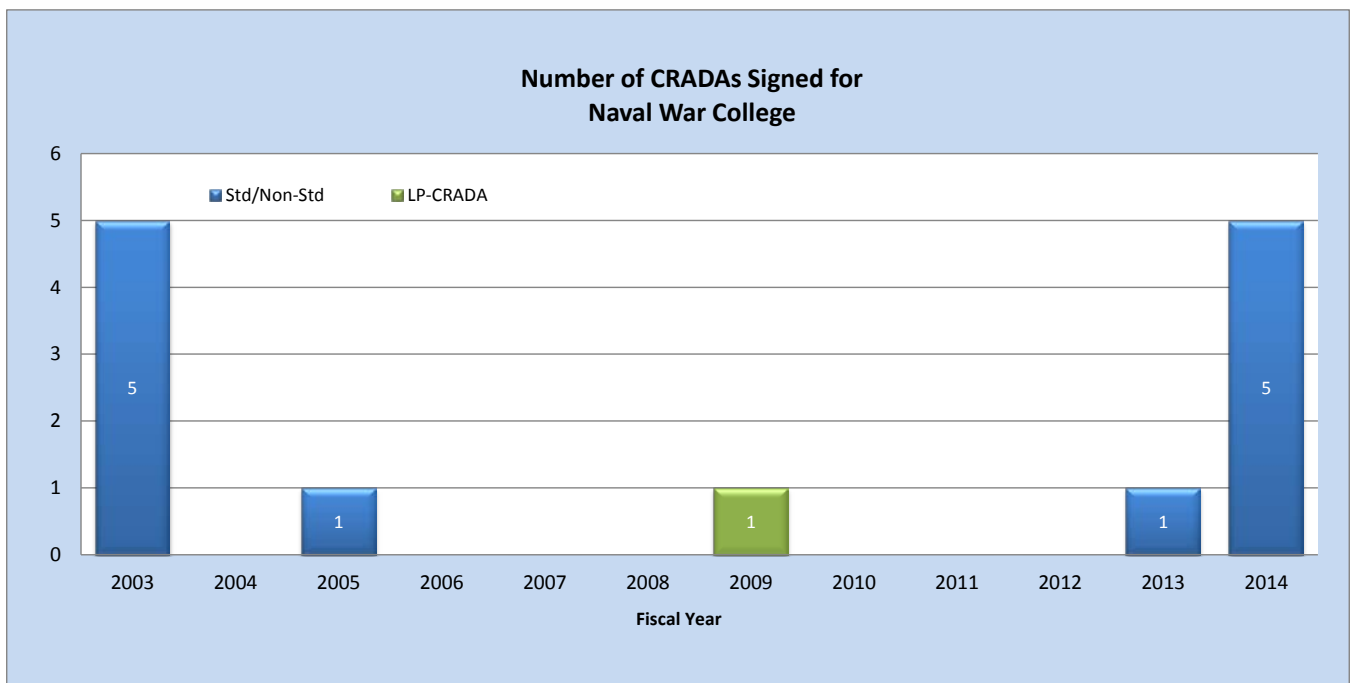
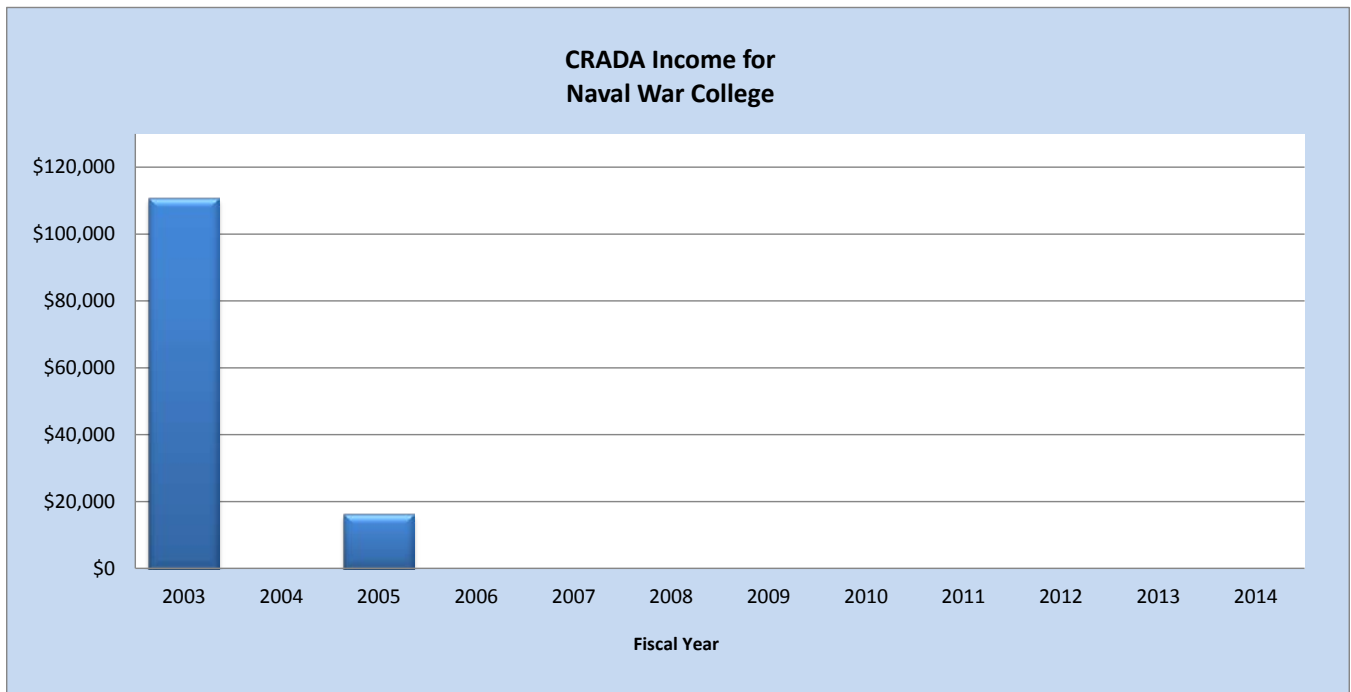


CRADA History for Naval War College

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$0		-	-	-	-
2003	\$110,730		5	-	5	5
2004	\$0		-	-	-	5
2005	\$16,204		1	-	1	6
2006	\$0		-	-	-	6
2007	\$0		-	-	-	6
2008	\$0		-	-	-	6
2009	\$0		-	1	1	7
2010	\$0		-	-	-	7
2011	\$0		-	-	-	7
2012	\$0		-	-	-	7
2013	\$0		1	-	1	8
2014	\$0		5	-	5	13

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

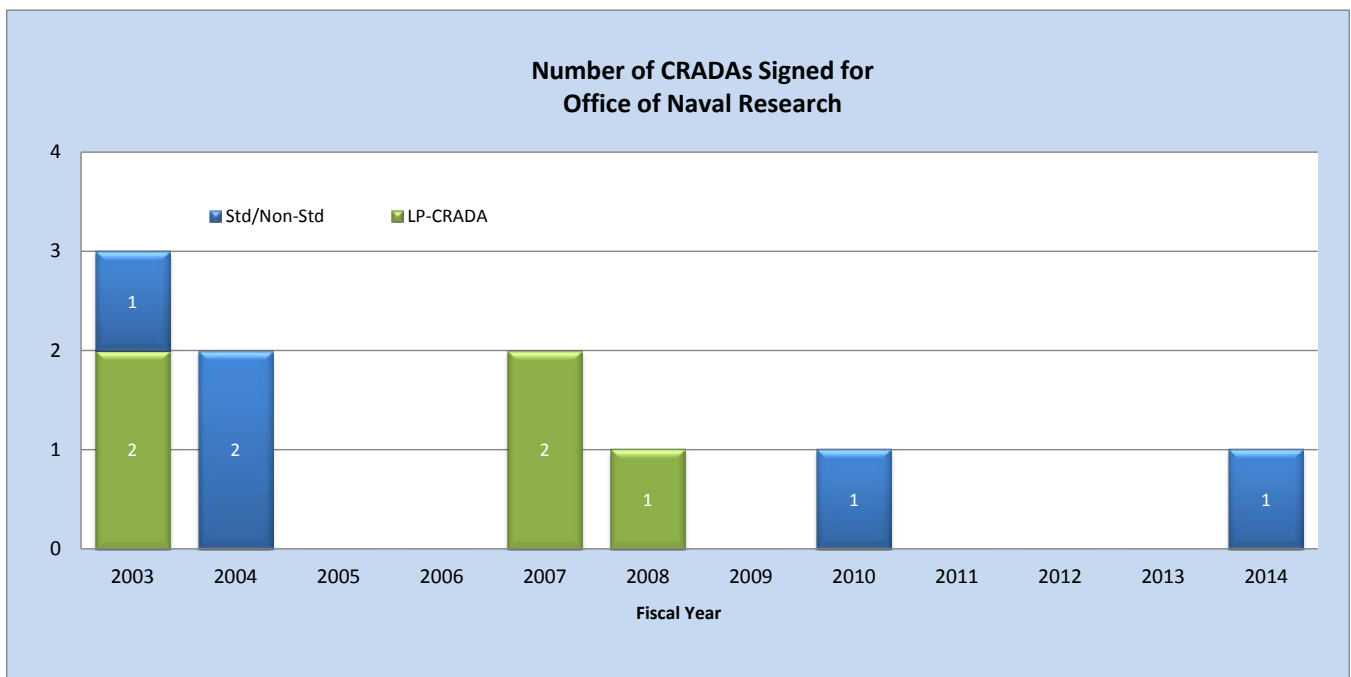
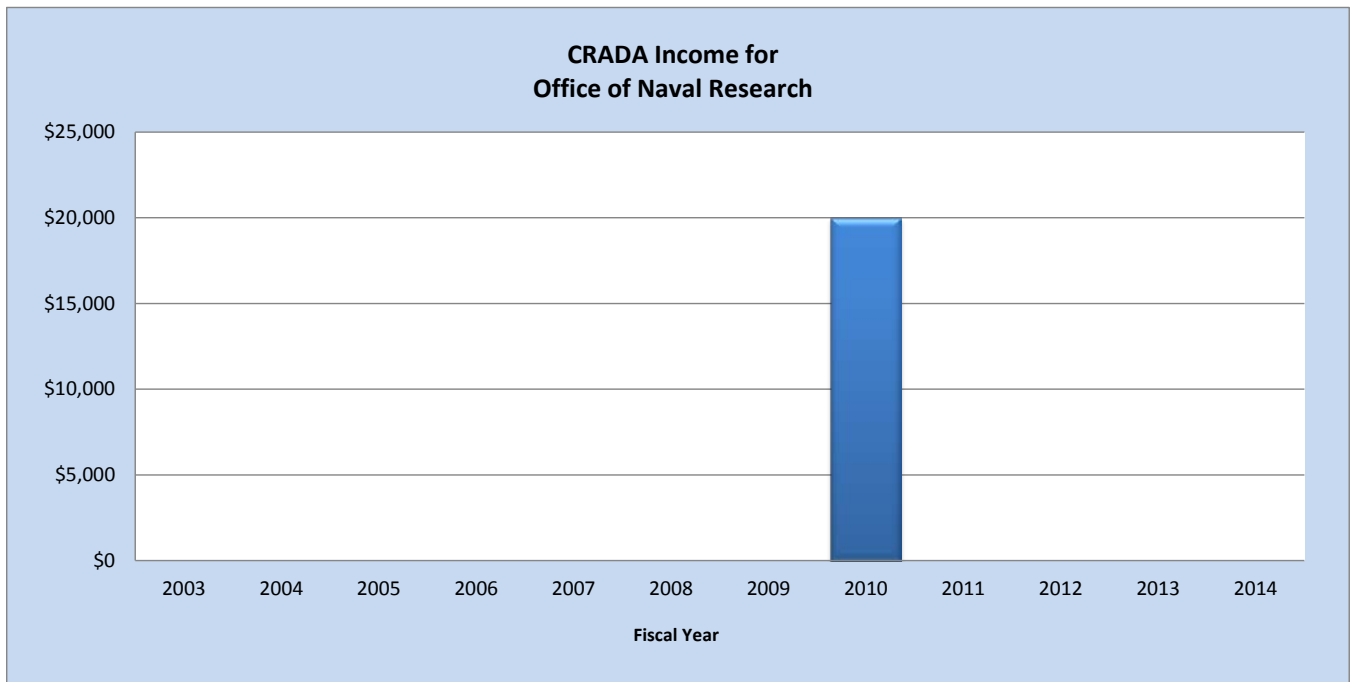


CRADA History for Office of Naval Research

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$0		1	-	1	1
2003	\$0		1	2	3	4
2004	\$0		2	-	2	6
2005	\$0		-	-	-	6
2006	\$0		-	-	-	6
2007	\$0		-	2	2	8
2008	\$0		-	1	1	9
2009	\$0		-	-	-	9
2010	\$20,000		1	-	1	10
2011	\$0		-	-	-	10
2012	\$0		-	-	-	10
2013	\$0		-	-	-	10
2014	\$0		1	-	1	11

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

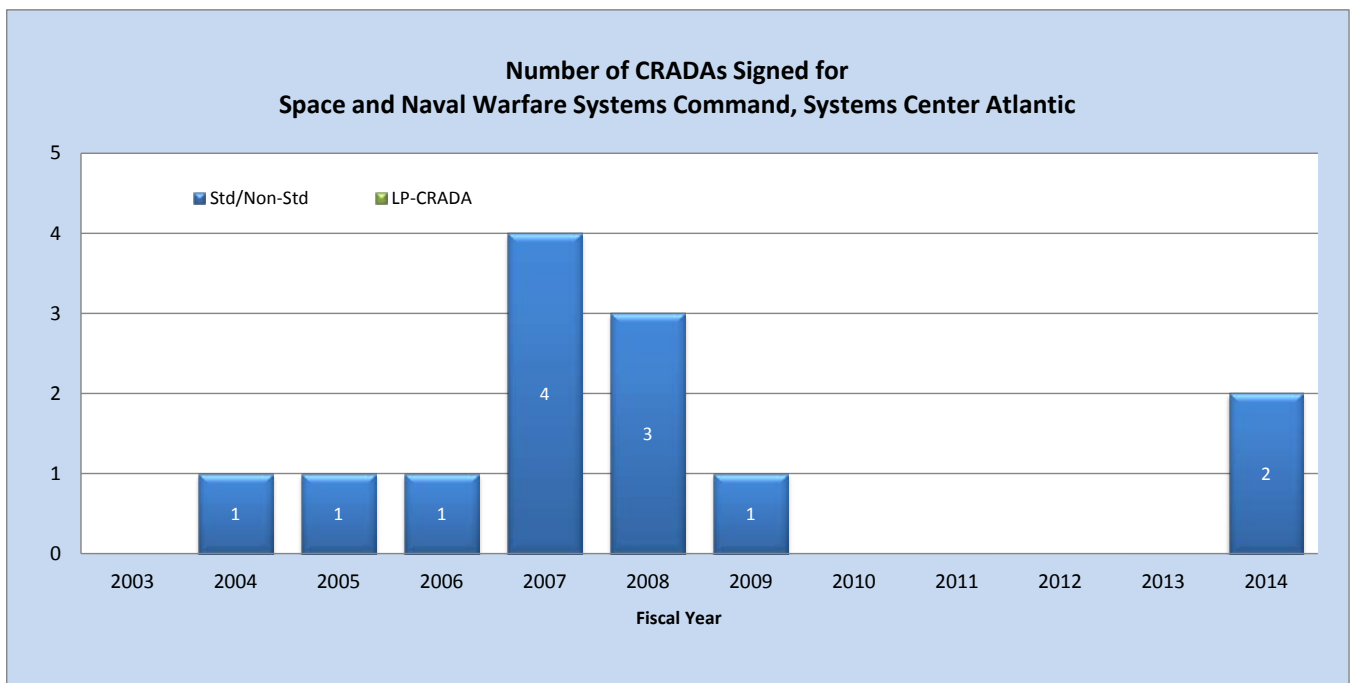
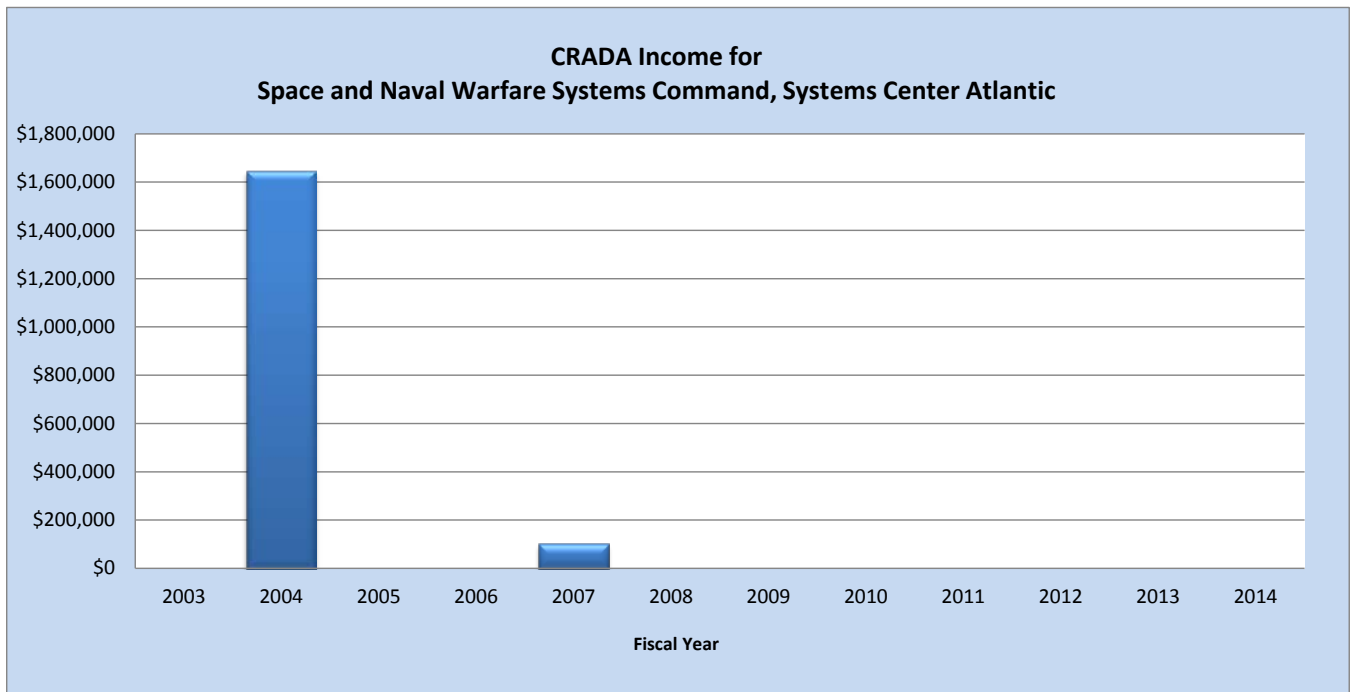


**CRADA History for
Space and Naval Warfare Systems Command, Systems Center Atlantic**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$502,473		8	-	8	8
2003	\$0		-	-	-	8
2004	\$1,644,007		1	-	1	9
2005	\$0		1	-	1	10
2006	\$0		1	-	1	11
2007	\$100,000		4	-	4	15
2008	\$0		3	-	3	18
2009	\$0		1	-	1	19
2010	\$0		-	-	-	19
2011	\$0		-	-	-	19
2012	\$0		-	-	-	19
2013	\$0		-	-	-	19
2014	\$0		2	-	2	21

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

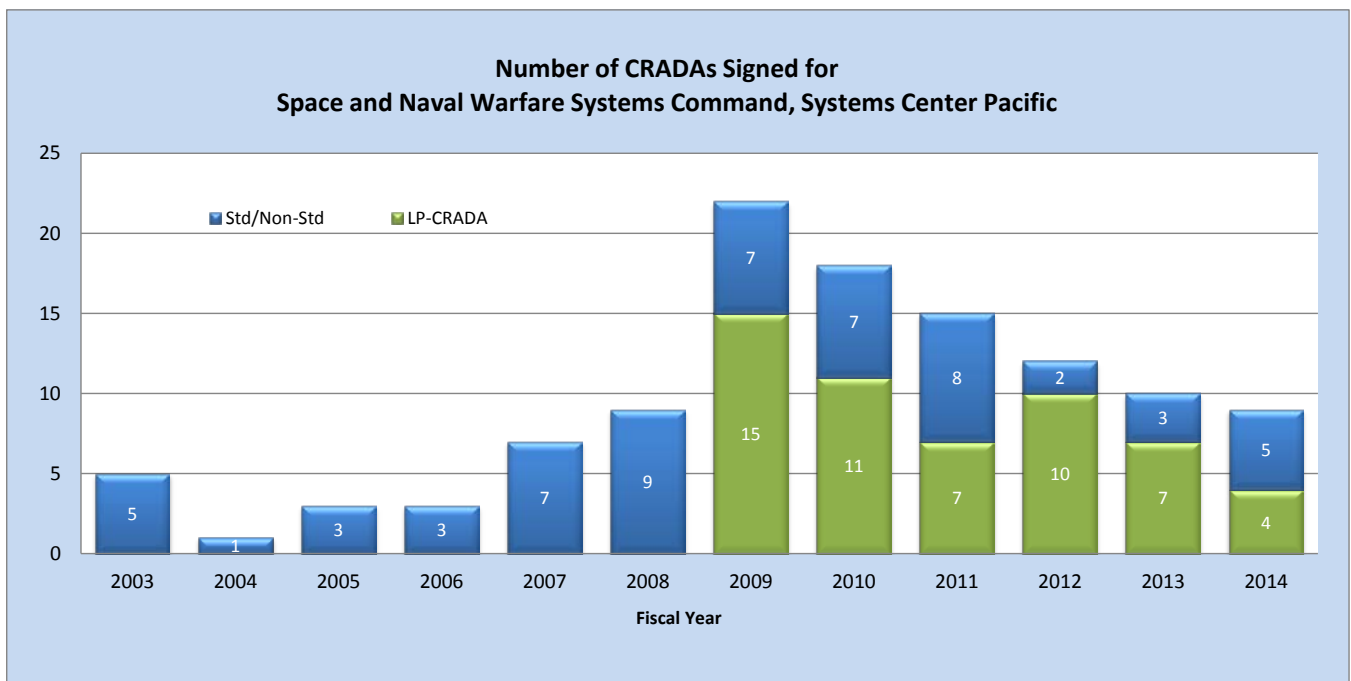
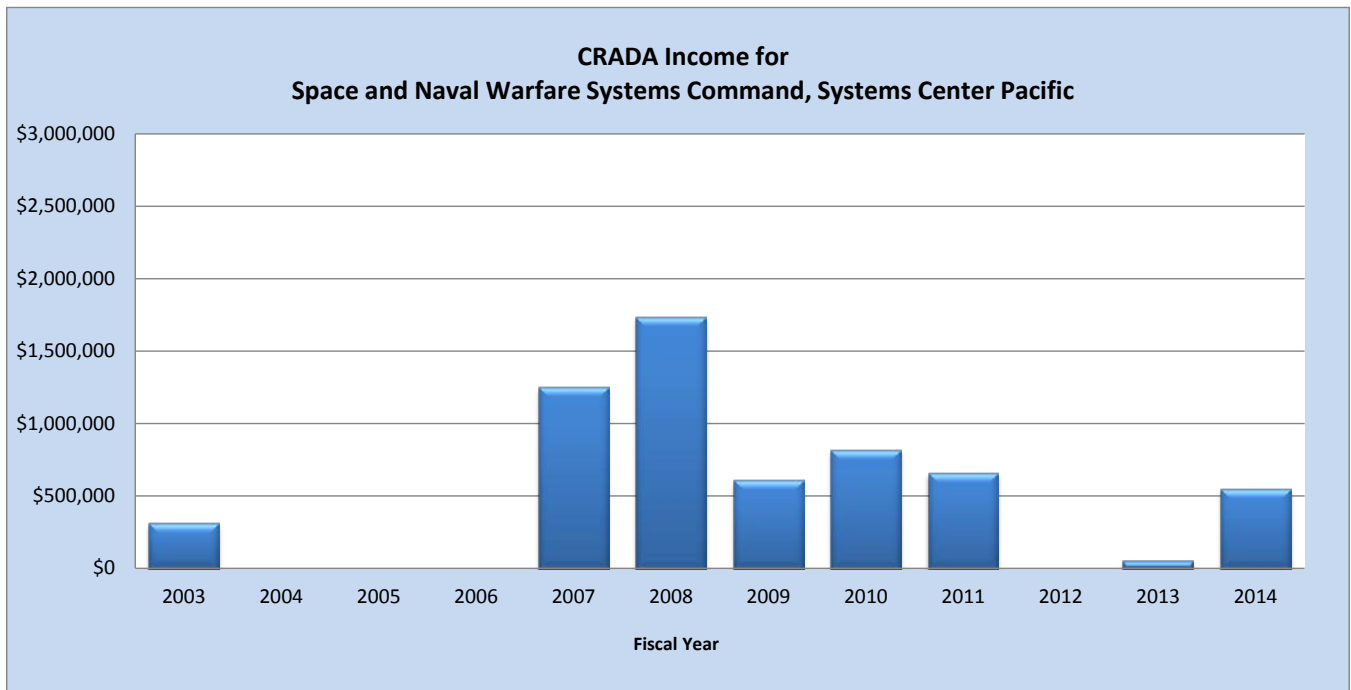


**CRADA History for
Space and Naval Warfare Systems Command, Systems Center Pacific**

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$5,034,869		47	2	49	49
2003	\$309,990		5	-	5	54
2004	\$0		1	-	1	55
2005	\$0		3	-	3	58
2006	\$0		3	-	3	61
2007	\$1,250,000		7	-	7	68
2008	\$1,736,900		9	-	9	77
2009	\$609,613		7	15	22	99
2010	\$818,000		7	11	18	117
2011	\$655,000		8	7	15	132
2012	\$0		2	10	12	144
2013	\$50,000		3	7	10	154
2014	\$550,000		5	4	9	163

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.

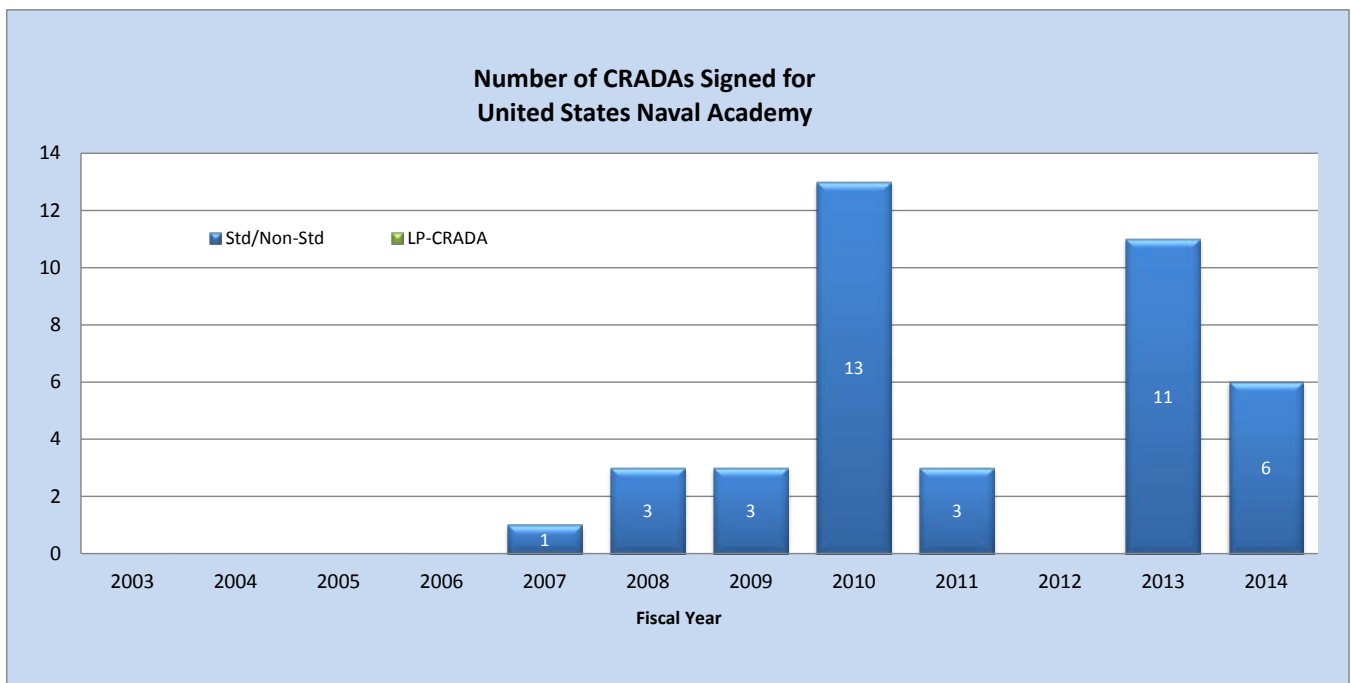
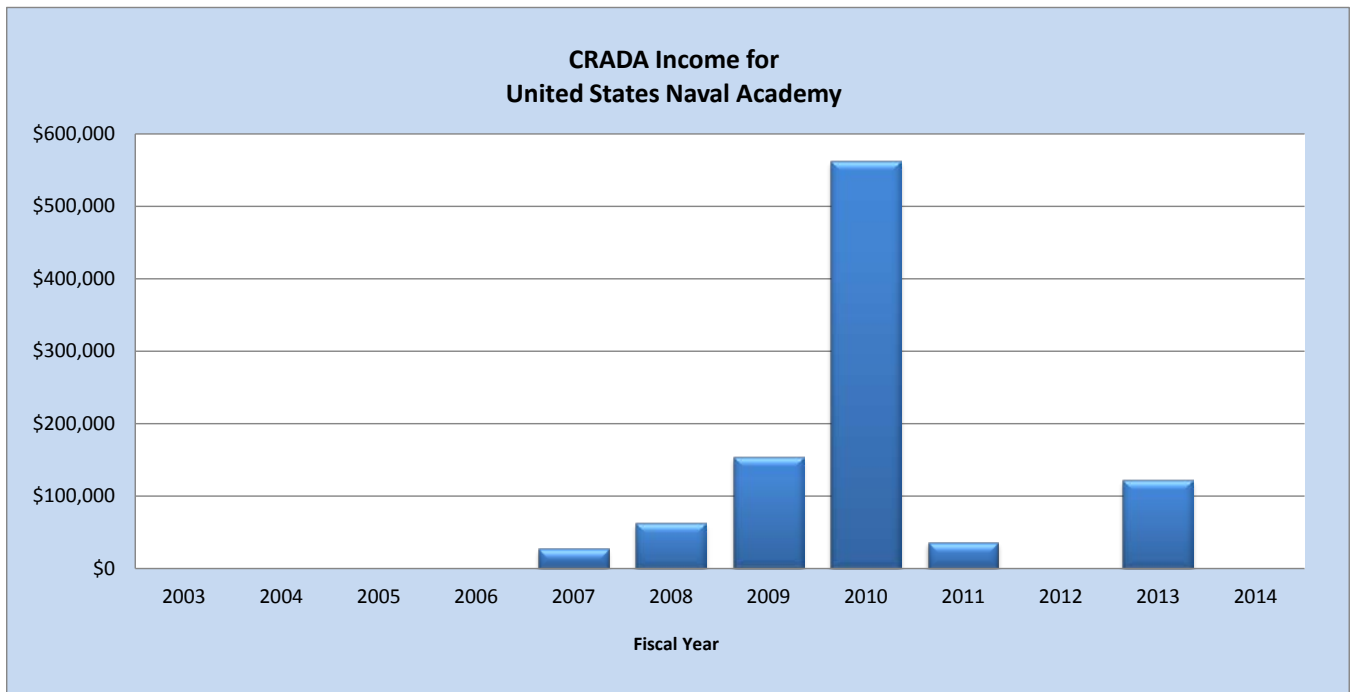


CRADA History for United States Naval Academy

Fiscal Year	CRADA Income*	FY14 Amendment Income	Number of CRADAs Signed			
			Std/Non-Std	LP-CRADA**	Total	Cumulative
1989-2002	\$2,000		3	-	3	3
2003	\$0		-	-	-	3
2004	\$0		-	-	-	3
2005	\$0		-	-	-	3
2006	\$0		-	-	-	3
2007	\$26,000		1	-	1	4
2008	\$62,430		3	-	3	7
2009	\$153,428		3	-	3	10
2010	\$562,118	\$58,850	13	-	13	23
2011	\$35,324	\$24,428	3	-	3	26
2012	\$0		-	-	-	26
2013	\$121,657	\$22,538	11	-	11	37
2014	\$0		6	-	6	43

* The entire income for each CRADA is credited to the year that the CRADA was received at the DoN T2 PO. Funds received under any amendments are allocated to the year when the original CRADA was received.

** Technical Assistance Mini-CRADAs are included in the LP-CRADA column.



This page intentionally left blank.



APPENDIX C

FY14 CRADA Listing

This page intentionally left blank.

Fleet Readiness Center East

Non-Federal Partner	CRADA Number	Subject
The Boeing Company	NCRADA-FRCE-13-002	Fused Deposition Modeling for Sheet Metal and Composite Tooling

Fleet Readiness Center Southwest

Non-Federal Partner	CRADA Number	Subject
Brighton Technologies Group, Inc.	NCRADA-FRCSW-14-001	Evaluation of Quality Assurance Support Equipment for Surface Preparation of Bonded Repairs

Naval Air Warfare Center Aircraft Division, Lakehurst

Non-Federal Partner	CRADA Number	Subject
Electro Standards Laboratories, Inc.	NCRADA-NAWCADLKE-13-237	R&D of Lithium Ion Supercapacitors with an Advanced Linear Motor
Ridgetop Group, Inc.	LP-CRADA-NAWCADLKE-14-248	Equipment Transfer of Two (2) Embodiments of the Multifunctional Information Distribution System Low Volume Terminal Remote Power Supply from NAWCADLKE to Ridgetop Group, Inc.

Naval Air Warfare Center Aircraft Division, Patuxent River

Non-Federal Partner	CRADA Number	Subject
Air Products and Chemicals, Inc.	LP-CRADA-NAWCADPAX-13-239	Material Transfer of Painted Test Samples of Al-Rich Coatings from NAWCADPAX to Air Products and Chemicals, Inc.
Alpha 1 Technologies, LLC	LP-CRADA-NAWCADPAX-14-244	Equipment Transfer of Four (4) Single Embodiments of Variable Intensity LED Illumination Systems from NAWCADPAX to Alpha 1 Technologies, LLC
Amyris, Inc.	LP-CRADA-NAWCADPAX-14-252	Material Transfer of Three (3), Fifty-Five (55) Drums of Amyris Diesel-Farnesane and Two Thousand Five Hundred (2,500) Gallons of Amyris Jet-Grade Farnesane from Amyris, Inc. to NAWCADPAX
Aviation Devices and Electronic Components, LLC	LP-CRADA-NAWCADPAX-13-241	Material Transfer of Corrosion Neutral Conducting Pigments and Products and Al-Rich Primer from NAWCADPAX to Aviation Devices and Electronic Components, LLC
Eckart America Corporation	LP-CRADA-NAWCADPAX-13-225	Material Transfer of Two (2) Kilograms of Aluminum Alloy Powder from NAWCADPAX to Eckart America Corporation
Evonik Corporation	LP-CRADA-NAWCADPAX-13-243	Material Transfer of Al-Rich Coatings from NAWCADPAX to Evonik Corporation
Fatigue Technology, Inc.	LP-CRADA-NAWCADPAX-14-249	Material Transfer of One (1) Pint Wet Kit with Mixing from NAWCADPAX to Fatigue Technology, Inc.
Luster-On Products, Inc.	LP-CRADA-NAWCADPAX-13-238	Material Transfer of Al-Rich Coatings from NAWCADPAX to Luster-On Products, Inc.
Oceus Networks, Inc.	LP-CRADA-NAWCADPAX-14-246	Equipment Transfer of 4G-LTE and Satellite Communications from Oceus Networks, Inc. to NAWCADPAX
The Open Group	NCRADA-NAWCADPAX-12-204	Common Computing Architectures and Software Applications Across Department of Defense Avionics Systems
The Pennsylvania State University, through its Applied Research Laboratory	NCRADA-NAWCADPAX-14-253	Hard/Soft Information Fusion in the Condition Monitoring of Aircraft
R Cubed Engineering, LLC	NCRADA-NAWCADPAX-14-245	Unmanned Air Systems R&D on Automatic Dependent Surveillance Broadcast and R3E Developed All Weather Sense and Avoid System
The Sherwin-Williams Company	LP-CRADA-NAWCADPAX-13-232	Material Transfer of Painted Test Samples of Al-Rich Coatings from NAWCADPAX to The Sherwin-Williams Company

Naval Air Warfare Center Aircraft Division, Patuxent River (Continued)

Non-Federal Partner	CRADA Number	Subject
Shur-Lok Company	LP-CRADA-NAWCADPAX-13-235	Material Transfer of Test Samples of Al-Rich Coatings and Corrosion Neutral Conducting Pigments and Products from NAWCADPAX to Shur-Lok Company
Stratasys, Inc.	LP-CRADA-NAWCADPAX-13-233	Material Transfer of Test Samples and Other Data of Navy Developed Polymer and Filler Base Material from NAWCADPAX to Stratasys, Inc.
TeraLogics, LLC	NCRADA-NAWCADPAX-14-250	Unified Video Afloat Node
Ultra Electronics Controls	NCRADA-NAWCADPAX-12-214	Passive Acoustic Structural Monitoring on United States Navy Helicopters

Naval Air Warfare Center Weapons Division, China Lake

Non-Federal Partner	CRADA Number	Subject
Aerojet Rocketdyne, Inc.	NCRADA-NAWCWDCL-14-258	Propellant Characterization for Missile Defense Applications
Allylix, Inc.	NCRADA-NAWCWDCL-14-255	Renewable High Density Fuels
Pacific Scientific Energetic Materials Company, LLC	NCRADA-NAWCWDCL-13-252	Novel High-Density Energetic Materials
Raytheon Missile Systems	NCRADA-NAWCWDCL-13-253	Net-Enabled Weapon for Anti-Surface Warfare Application
Rolls-Royce North American Technologies, Inc.	NCRADA-NAWCWDCL-14-257	Demonstration and Performance Testing of a Prime Power/Thermal Management System in Conjunction with a High Energy Laser

Naval Air Warfare Center Weapons Division, Point Mugu

Non-Federal Partner	CRADA Number	Subject
Raytheon Company	NCRADA-NAWCWDPM-14-256	Advanced Radar EW and EA System of Systems Research
Raytheon Company, dba Raytheon KTECH	NCRADA-NAWCWDPM-13-254	C-Band Telemetry Ground Equipment Support

Naval Medical Center, Portsmouth

Non-Federal Partner	CRADA Number	Subject
Denver Health and Hospital Authority, dba Denver Health Medical Center	NCRADA-NMCP-13-249	A Randomized Prospective Analysis of Time to Diagnosis and Length of Stay of Emergency Department Pelvic Ultrasonography
East Carolina University	NCRADA-NMCP-13-234	Research Collaboration in Psychophysiology and Biofeedback
Grifols, Inc.	NCRADA-NMCP-13-237	A Prospective, Single-Blind, Randomized, Phase III Study to Evaluate the Safety and Efficacy of Fibrin Sealant Grifols as an Adjunct to Hemostasis During Soft Tissue Open Surgeries
The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.	NCRADA-NMCP-13-245	Children's Oncology Group Sponsored Research Protocols
Northwestern University	LP-CRADA-NMCP-14-257	Material Transfer for the Study "Flexibility in Duty Hour Requirements for Surgical Trainees Trials" from NMCP to Northwestern University
Treatment Innovations, LLC	NCRADA-NMCP-13-244	Assessment of Behavioral Addictions in Military Personnel Seeking Residential Treatment for Substance Abuse
University of Delaware	NCRADA-NMCP-13-248	Collaboration in Orthopaedic Rehabilitative Research

Naval Medical Center, San Diego

Non-Federal Partner	CRADA Number	Subject
AMO Development, LLC	NCRADA-NMCSD-14-442	Military iDesign PRK Study
CEL-SCI Corporation	NCRADA-NMCSD-13-427	CIP# NMCSD.2013.0080; Perianal Wart Study
The Geneva Foundation	NCRADA-NMCSD-09-312	CIP# NMCSD.2009.0029; A Head to Head Comparison of Virtual Reality Treatment for Post Traumatic Stress Disorder
The Geneva Foundation	NCRADA-NMCSD-14-435	CIP# NMCSD.2013.0045; Is Preoperative Administration of STOP-BANG Predictive of Adverse OSA Parameters?
The Geneva Foundation	NCRADA-NMCSD-14-445	CIP# NMCSD.2009.0029; A Head to Head Comparison of Virtual Reality Treatment for Post Traumatic Stress Disorder

Naval Medical Center, San Diego (Continued)

Non-Federal Partner	CRADA Number	Subject
The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.	NCRADA-NMCSD-14-434	Children's Oncology Group Sponsored Research Protocols
The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.	NCRADA-NMCSD-14-444	CIP# NMCSD.1998-0136; CRADA for Uniformed Services University National Prostate Cancer Database for the Center for Prostate Disease Research with Patterns of Care, Outcomes and Prognostic Analyses, Protocol #GT90CM and any Related Protocols
NANOSPHERE, Inc.	LP-CRADA-NMCSD-13-417	Material Transfer of NMCSD.2013.0050; Verigene Enteric Pathogens Nucleic Acid Test IUO Phase II Method Comparison Study from NANOSPHERE, Inc. to NMCSD
The Regents of the University of California, Los Angeles	NCRADA-NMCSD-13-423	CIP# NMCSD.2009.0011; Rehabilitation Augmentation Using a Novel Haptic Feedback Device
San Diego State University Research Foundation	NCRADA-NMCSD-14-437	CIP# 2014.0015; Feasibility and Pilot Testing of SBI to Reduce Alcohol Misuse Among Active Duty Members in a Military ER Setting
Sanford-Burnham Medical Research Institute	NCRADA-NMCSD-12-403	CIP# NMCSD.2012.0091; Biomarker and Microbiome Analysis in Archived Human Cancers
Strategic Operations, Inc.	LP-CRADA-NMCSD-14-440	Equipment Transfer of a Non-Flyable MV-22 Osprey Tiltrotor Aircraft Platform from NMCSD to Strategic Operations, Inc.
The University of Delaware	NCRADA-NMCSD-13-416	BADER Consortium Bridging Advanced Developments for Exceptional Rehabilitation
University of Southern California	NCRADA-NMCSD-14-438	CIP# NHCP.2013.0146; Occupational Therapy Intervention to Improve Community Integration of Military Traumatic Brain Injury Patients
Veterans Village San Diego	NCRADA-NMCSD-13-411	CIP# NMCSD.2013.0005; A Retrospective Demographic Analysis for the San Diego Veteran's Village Population
The Washington University	NCRADA-NMCSD-13-426	CIP# NMCSD.2007.1005; Adenovirus Associated Gene Delivery System

Naval Medical Research and Development Command

Non-Federal Partner	CRADA Number	Subject
The Administrators of the Tulane Educational Fund	LP-CRADA-NMRC-14-9272	Material Transfer of up to Two Hundred Eighty-Five (285) Serum Samples (250 mcl each) from NMRC to The Administrators of the Tulane Educational Fund
The Administrators of the Tulane Educational Fund	LP-CRADA-NMRC-14-9283	Material Transfer of Five (5) mg of the Stabilized Fimbrial Tip Adhesin Proteins CfaE and CfaEB and the Whole Fimbrial Preparation CFA/I from NMRC to The Administrators of the Tulane Educational Fund
The Administrators of the Tulane Educational Fund	NCRADA-NMRC-12-9092	Multiparty Studies of Heterotopic Ossification
Agave BioSystems, Inc.	LP-CRADA-NMRC-13-9241	Material Transfer of Putative Enteric Pathogen Antigens and Corresponding Control Serum from NMRC to Agave BioSystems, Inc.
Agave BioSystems, Inc.	NCRADA-NMRC-12-9054	Evaluation of Infectious Disease Diagnostic Assays Using Isothermal Amplification Technologies
American University Center for Food Studies/ Department of Biology	LP-CRADA-NMRC-13-9240	Material Transfer of Five (5) Grams of Pulmozyme and Dispersin B Enzymes from American University Center for Food Studies/Department of Biology to NMRC
Aquila Diagnostic Systems, Inc.	NCRADA-NMRC-14-9313	Field Validation of the Accutax Molecular Diagnostic System
Baylor College of Medicine	NCRADA-NMRC-13-9127	Histological Studies of Heterotopic Ossification
BigByte S.A.C.	NCRADA-NMRC-14-9337	Development, Testing, Evaluation, Implementation and Adoption of Automated Solutions for Data Capture, Visualization, Analysis, Dissemination and Alerting for Public Health Management, Decision-Making and Early Response in Resource-Limited Settings
Bioject Medical Technologies, Inc.	LP-CRADA-NMR-13-9111	Equipment Transfer of Two (2) Sets of Biojector-2000 and/or Bioject-Zetajet Needle Free Injection Systems from Bioject Medical Technologies, Inc. to NMRC
Biovest International, Inc.	NCRADA-NHRC-13-4075	Continued Development of the Biovest Hollow Fiber Perfusion Bioreactor (AutovaxID) in Production of Virus-Like Particles, Recombinant Proteins and Therapeutic Antibodies
Board of Regents of the University of Nebraska	NCRADA-NMRC-13-9192	Rapid Methods for Identification of Biowarfare Agents II

Naval Medical Research and Development Command (Continued)

Non-Federal Partner	CRADA Number	Subject
Board of Trustees of the University of Alabama for the University of Alabama at Birmingham	LP-CRADA-NMRC-13-9157	Material Transfer of Two Hundred Ten (210) Samples of De-Identified Human Serum and Five to Ten (5-10) Antigens from Known Microorganisms from NMRC to Board of Trustees of the University of Alabama for the University of Alabama at Birmingham
Case Western Reserve University	NCRADA-NMRC-14-9260	Improvements in Malaria Detection, Growth and Vaccine Candidates
The Children's Hospital of Philadelphia	LP-CRADA-NMRC-14-9340	Material Transfer of Fifteen (15) Vials of Immunoglobulin Genes Encoding for Anti-P. <i>falciparum</i> Human Monoclonal Antibodies from NMRC to The Children's Hospital of Philadelphia
The Children's Hospital of Philadelphia	NCRADA-NMRC-13-9188	Preventative Therapeutics for Heterotopic Ossification
The Cleveland Clinic Foundation	NCRADA-NMR-13-9082	Early Diagnosis and Intervention Strategies for Post-Traumatic Heterotopic Ossification in Severely Injured Extremities
The Cleveland Clinic Foundation	NCRADA-NMRC-14-9259	Optimization of Soft Tissue Management, Spacer Design and Grafting Strategies for Large Segmental Bone Defects Using the Chronic Caprine Tibial Defect Model
Codagenix, Inc.	LP-CRADA-NMRC-14-9264	Material Transfer of Two (2) Vials of Synthetic Dengue Virus Strains (up to 6 Strains) from Codagenix, Inc. to NMRC
Duke University	LP-CRADA-NMRC-13-9247	Material Transfer of Plasma Specimens and De-Identified Clinical Data Accompanying Each Specimen Including the Clinically Adjudicated Diagnoses Rendered from Duke University to NMRC
Duke University	NCRADA-NSMRL-13-9163	Carbon Dioxide Narcosis in Hyperbaric Environments
Electric Boat Corporation	NCRADA-NSMRL-12-9057	Future Design and Human Systems Integration Collaboration
Emory University	LP-CRADA-NMRC-14-9346	Material Transfer of De-Identified Human Derived Samples for Surgical Critical Care Initiative Tissue and Clinical Data Acquisition Protocol from Emory University to NMRC
The Geneva Foundation	NCRADA-NAMRU-SA-13-9200	Effects of Routes of Administration of Vasopressin in a Cardiac Arrest Model

Naval Medical Research and Development Command (Continued)

Non-Federal Partner	CRADA Number	Subject
The General Electric Company, through its GE Appliances & Lighting Business	LP-CRADA-NMR-11-8903	Equipment Transfer of Four Hundred (400) Units of Prototype F20T12 Fluorescent Light Bulbs from The General Electric Company, through its GE Appliances & Lighting Business to Naval Submarine Medical Research Laboratory
GlycoVaxyn AG	NCRADA-NMRC-14-9250	Clinical Evaluation of a <i>shigella flexneri 2a</i> Bioconjugate Vaccine
The Gorgas Memorial Institute of Health Studies	LP-CRADA-NMRC-14-9305	Material Transfer of Parasite Species and Parasite Vectors of Peru and Panama from The Gorgas Memorial Institute of Health Studies to NAMRU-6
Hemarina SA	NCRADA-NMRC-13-9225	Advancing Oxygen Therapeutic Agent Development by Evaluating the Vasoactivity, Oxygen Carrying Capacity, and Effectiveness of M-101 in a Non-Clinical Model as a Prehospital Resuscitation Fluid for Traumatic Brain Injury, with or without Hemorrhagic Shock
The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.	LP-CRADA-NMRC-14-9273	Material Transfer of a Tetravalent Dengue Vaccine from The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., and NMRC to Walter Reed Army Institute of Research
Ichor Medical Systems, Inc.	LP-CRADA-NMR-10-9235	Equipment and Material Transfer for Antigen Discovery Project from Ichor Medical Systems, Inc. to NMRC
INBIOS International, Inc.	LP-CRADA-NMRC-14-9338	Material Transfer of Antibodies Specific for Dengue Virus, Chikungunya Virus, Interleukin-10 and Labeling Reagents from NMRC to INBIOS International, Inc.
INBIOS International, Inc.	LP-CRADA-NMRC-14-9363	Material Transfer of Diagnostic Tests for Infectious Diseases from INBIOS International, Inc. to NMRC
InDevR	LP-CRADA-NMRC-13-9222	Material Transfer of One (1) AmpliPHOX Microarray Reader, One (1) Computer and Software from InDevR to NMRC
Instituto de Investigacion Nutricional	NCRADA-NMRC-14-9258	Joint Clinical Trial Efforts in Dengue and Norovirus in Peru
International Center for Advanced Research and Applied Science	NCRADA-NMRC-14-9269	Development, Testing, Monitoring, Evaluation, Implementation and Adoption of Automated Data Capture, Visualization, Analysis, Dissemination and Alerting Solutions for Public Health Management, Decision-Making, Early Response and Capacity Building in Resource-Limited Settings

Naval Medical Research and Development Command (Continued)

Non-Federal Partner	CRADA Number	Subject
Kane Biotech, Inc.	LP-CRADA-NMRC-13-9223	Material Transfer of Five (5) mgs of Dispersin B from NMRC to Kane Biotech, Inc. to Study the Synergistic Effect of Bacteriophage and Dispersin B on Wound Healing Infected with <i>A. baumannii</i> Bacteria
Kansas State University	LP-CRADA-NMRC-13-9217	Material Transfer of One (1) Frozen Vial Each of Eighteen (18) Strains of Enterotoxigenic Escherichia from NMRC to Kansas State University
Kwik Trip, Inc.	LP-CRADA-NMRC-13-9231	Material Transfer of One (1) Frozen Vial Each of <i>E. coli</i> Strains of Serogroup 078, 0124, 0125 and 0142 from NMRC to Kwik Trip, Inc.
LaJolla Institute of Allergy and Immunology	LP-CRADA-NMRC-13-9230	Material Transfer of Two (2) to Ten (10) Vials of Strains of Dengue Virus and Anti-Dengue Antibodies from LaJolla Institute of Allergy and Immunology to NMRC
LaJolla Institute of Allergy and Immunology	LP-CRADA-NMRC-14-9277	Material Transfer of Five (5) Vials of DNA Vaccine and Five (5) Vials of Inactivated Virus Vaccine from NMRC to LaJolla Institute of Allergy and Immunology
Libcm-Universidad Nacional de Quilmes	LP-CRADA-NMRC-13-9224	Material Transfer of One Hundred (100) ml per Vial of Lambda Phage Constructs with Either Reporter Genes, Such as GFP and/or the Diphtheria Toxin Genes from NMRC to Libcm-Universidad Nacional de Quilmes
Mimosa Acoustics	NCRADA-NSMRL-14-9293	Improved Test Equipment and Procedures for Military Hearing Conservation Programs
Molecular Epidemiology Unit, Institut Pasteur du Cambodge	LP-CRADA-NMR-14-9300	Material Transfer of no more than Two Hundred (200) Samples of De-Identified Quality Control Samples of K13 Malaria Samples from Molecular Epidemiology Unit, Institut Pasteur du Cambodge to NAMRU-6
Noguchi Memorial Institute for Medical Research	LP-CRADA-NMRC-13-9253	Material Transfer of Twenty (20) mg of PfCSP and PfAMA1 Peptides from NMRC to Noguchi Memorial Institute for Medical Research
NuvOx Pharma, LLC	NCRADA-NMRC-13-9227	Advancing Oxygen Therapeutic Agent Development by Evaluating the Vasoactivity, Effectiveness of Dodecafluoropentane Emulsion (DDFPe) NUV-108
The Ohio State University	LP-CRADA-NMR-14-9350	Material Transfer of up to Twelve (12) Shipments of Either Suspension or Powders; (1-2 mg/mL Suspension) (5-50 mg Powder) from The Ohio State University to NAMRU-SA

Naval Medical Research and Development Command (Continued)

Non-Federal Partner	CRADA Number	Subject
Oxygen Biotherapeutics, Inc.	NCRADA-NMRC-13-9229	Advancing Oxygen Therapeutic Agent Development by Evaluating the Vasoactivity, Oxygen Carrying Capacity, and Effectiveness of Oxycyte® in a Non-Clinical Model as a Prehospital Resuscitation Fluid for Traumatic Brain Injury, with or without Hemorrhagic Shock
Oxygen Biotherapeutics, Inc.	NCRADA-NMRC-14-9294	Assessment of the Safety and Efficacy of the Perfluorocarbon Emulsion, Oxycyte® as a Treatment for Decompression Sickness and Related Injuries
OXYVITA, Inc.	NCRADA-NMRC-13-9220	Evaluating the Vasoactivity, Oxygen Carrying Capacity and Effectiveness of OXYVITA, Inc. Products
PATH Vaccine Solutions	NCRADA-NMRC-13-9215	Expanded Immunological Evaluation Performed for Phase 2b Enterotoxigenic <i>Escherichia coli</i> Clinical Trials
PhageVax, Inc.	LP-CRADA-NMRC-13-9228	Material Transfer of One Hundred (100) ml of Construct Influenza and Malaria Specific Vaccines from NMRC to PhageVax, Inc.
Prisma	NCRADA-NAMRU-6-13-9251	Genetic Characterization of Norovirus in Children Younger Than Five Years Old with and without Diarrhea, and Association with Clinical Severity of Gastroenteritis in a Peruvian Hospital
Program for Appropriate Technology in Health	NCRADA-NMRC-13-9212	Adapting the Inhibition of Liver Stage Development Assay for High Throughput Analysis of Novel Antibodies
The Regents of the University of California, Davis	NCRADA-NMRC-14-9297	Spatial Repellant Products for Control of Vector-Borne Diseases
The Regents of the University of California, on behalf of the University of California, Los Angeles	NCRADA-NAMRU-6-12-9055	Expedited Partner Therapy and STI Control for MSM in Peru
Regents of the University of New Mexico - HSC	NCRADA-NAMRU-6-14-9285	Epitope Mapping of Human Antibody Response to Dengue Virus
The Research Foundation for SUNY on Behalf of University at Buffalo	NCRADA-NMRC-14-9306	Electrical Stimulation Methods for the Prevention of Orthopaedic Infections and Biofilm Formation on Osteointegrated Hardware and Prosthesis
Rhode Island Hospital	LP-CRADA-NMRC-14-9334	Material Transfer of One Hundred (100) ml of Malaria Phage Vaccine from NMRC to Rhode Island Hospital

Naval Medical Research and Development Command (Continued)

Non-Federal Partner	CRADA Number	Subject
Salix Pharmaceuticals, Inc.	LP-CRADA-NMRC-14-9292	Material Transfer of One Hundred Twelve (112) Tablets of 550 mg Rifaximin from Salix Pharmaceuticals, Inc. to NMRC
Saskatchewan Ministry of Agriculture	LP-CRADA-NMRC-13-9201	Material Transfer of Two Hundred (200) Lateral Flow Immunoassay Test Kits and Two Hundred (200) Additional Kits per year for the life of the LP-CRADA from NMRC to Saskatchewan Ministry of Agriculture
Sentient Lifesciences	LP-CRADA-NMRC-14-9331	Material Transfer of N-Acetylcysteine Amide from Sentient Lifesciences to NMRC
Southwest Research Institute®	NCRADA-NAMRU-SA-13-9183	Antibacterial Surface Design Through Biophysical Simulation Models of Bacterial and Biofilm Interactions with Coatings with Micro/Nano Patterned Topologies
The Trustees of Princeton University	NCRADA-NMRC-14-9289	Towards Eradication of Human Malaria: Molecular Characterization of Plasmodial Dormancy
University of Maryland, Baltimore on behalf of its Howard Hughes Medical Institute and Center for Vaccine Development	NCRADA-NMRC-14-9301	Assessment of <i>in vivo</i> and <i>in vitro</i> Efficacy of Combined Artesunate/Mefloquine Therapy for Treatment of Uncomplicated <i>Plasmodium falciparum</i> Infection in Peru, Kenya, and Thailand
University of Michigan	NCRADA-NMRC-13-9150	Creating a Spectroscopic and Genetic Profile for Risk Stratification and Management of Heterotrophic Ossification
University of Montana	LP-CRADA-NMRC-13-9190	Material Transfer of One (1) Culture Plate Containing Colonies of <i>Bartonella ancashii</i> from NMRC to University of Montana
The University of Texas at San Antonio	LP-CRADA-NAMRU-SA-13-9171	Material Transfer of One Hundred (100) Samples of Anti-Microbial Nanoparticle Based Material from The University of Texas at San Antonio to NAMRU-SA
University of Texas Medical Branch	LP-CRADA-NMRC-14-9303	Material Transfer of CHIK Vaccine Strain, CHIK cDNA Clone, and CHIK Antigens from University of Texas Medical Branch to NAMRU-6
University of Vermont and State Agricultural College	NCRADA-NMRC-14-9193	Clinical Illness and Immunologic Responses in Natural and Experimental <i>C. jejuni</i> Infection
Vanderbilt University	NCRADA-NMRC-14-9298	Vaccine and Treatment Evaluation Unit

Naval Postgraduate School

Non-Federal Partner	CRADA Number	Subject
Arcturus UAV, LLC	NCRADA-NPS-14-0202	Continued Development of Airdrop Payload Delivery Capability for Unmanned Aerial Vehicles
Boston Micromachines Corporation	LP-CRADA-NPS-14-0088	Equipment Transfer of 6x6 Microelectromechanical Deformable Mirror from Boston Micromachines Corporation to NPS
Bubbleology Research, Inc.	NCRADA-NPS-14-0197	In Situ Validation and Trace Gas Remote Sensing
City of Los Angeles acting through its Board of Harbor Commissioners	NCRADA-NPS-14-0193	Assessing and Improving Resilience of Operations at the Port of Los Angeles
Dell, Inc.	LP-CRADA-NPS-13-0083	Equipment Transfer of Dell Latitude Rugged Laptops from Dell, Inc. to NPS
Huntington Ingalls, Inc.	NCRADA-NPS-14-0199	Submarine Operations, Systems and Future Capabilities Studies
HyPerComp, Inc.	NCRADA-NPS-14-0201	Modeling and Optimizing Turbines for Unsteady Flow
LIG NEX1	NCRADA-NPS-13-0189	Research on Conceptual Design and Concepts of Operations for the Future Autonomous Systems for Naval Mine Warfare
NTT IT Corporation	NCRADA-NPS-14-0194	Developing a Field-Deployable Video Acquisition Capability
Office of the Sheriff, County of Monterey	LP-CRADA-NPS-14-0085	Equipment Transfer of SkyIMD TASE200 Gimbal Camera System from NPS to Office of the Sheriff, County of Monterey
Onvoi, LLC	LP-CRADA-NPS-14-0086	Equipment Transfer of Passive Optical Network from Onvoi, LLC to NPS
The Oxnard Harbor District, The Port of Hueneme	NCRADA-NPS-14-0198	Maritime Technology and Port Security Research Studies
Purdue University	LP-CRADA-NPS-14-0087	Equipment Transfer of Laboratory Equipment for Development and Testing of New Batteries from NPS to Purdue University
SAAB Defense and Security USA, LLC	NCRADA-NPS-13-0187	Littoral Flotilla Study
Unconventional Concepts, Inc.	NCRADA-NPS-13-0188	Design, Development and Assessment of a Tethered Long-Endurance UAV for Homeland Security Applications
University of Maryland	NCRADA-NPS-14-0204	Comparing Failed, Foiled, Completed and Successful Terrorist Attacks

Naval Postgraduate School (Continued)

Non-Federal Partner	CRADA Number	Subject
University of Southern California	NCRADA-NPS-14-0191	Evaluation of the Impact of Medicare Payment Cuts on Treatment Process and Outcomes for Medicare Patients
University of Southern California	NCRADA-NPS-14-0195	Army Science and Technology Futures Project
University of Southern California	NCRADA-NPS-14-0200	Earthquake Modeling and Simulation Methods
The University of Texas at Austin	NCRADA-NPS-14-0192	Right Size Virologic Surveillance Project
The University of Texas at Austin	NCRADA-NPS-14-0196	Epidemiology Studies
Vigilant Cyber Systems, Inc.	NCRADA-NPS-14-0205	Cyber Battle Damage Assessment Tool
WarpIV Technologies, Inc.	NCRADA-NPS-13-0190	High Power Radio Frequency Dynamic Surface Engagement Modeling and Simulation Tool
zSpace, Inc.	LP-CRADA-NPS-13-0084	Equipment Transfer of Virtual-Holographic Computing Platforms from zSpace, Inc. to NPS

Naval Research Laboratory

Non-Federal Partner	CRADA Number	Subject
EnZinc, Inc.	NCRADA-NRL-14-542	A Rechargeable, Dendrite-Free Anode for a Zinc Battery
FRAS Technology	NCRADA-NRL-13-533	Dynaview Sea Floor Demo 2012
Huntington Ingalls, Inc., through its division Newport News Shipbuilding	NCRADA-NRL-13-540	Implementation of NRL's Electrochemical Acidification Carbon Capture and Hydrocarbons Synthesis Technologies in a Synthetic Fuel Ship Design
LumaCyte, LLC	NCRADA-NRL-14-543	Laser Analysis and Sorting Instrument Development and Testing for Commercialization
Mercury Continuity, Inc.	NCRADA-NRL-14-547	Usage of TREC for Commercial Ship-to-Shore Communications
Microlink Devices, Inc.	NCRADA-NRL-14-550	Epitaxial Lift-Off III-V Solar Cell For High Temperature Operation

Naval Research Laboratory (Continued)

Non-Federal Partner	CRADA Number	Subject
Panasonic Avionics Corporation	NCRADA-NRL-13-538	TAMDAR System Research for Improved Navy METOC
Pennsylvania State University	NCRADA-NRL-12-519	Radiation Effects on Antimony-Based Metal-Oxide Semiconductor Transistors
Prescient Edge Corporation	NCRADA-NRL-13-537	Polymer Resistant to Prolonged Heat Exposure Textile System
Protonex Technology Corporation	NCRADA-NRL-14-544	Man-Portable Electrical Power System Based on Photovoltaics
Raytheon Company	NCRADA-NRL-14-552	Non-Persistent Communications
Rochester Precision Optics	NCRADA-NRL-13-541	IR Glass Preforms for Making Monolithic Optics
Space Data Corporation	NCRADA-NRL-14-548	Balloon-Launched Payload Return UAV Technologies
University of Hamburg	NCRADA-NRL-14-551	CT-Analyst Validation Project for Hamburg Germany
University of Southern California	NCRADA-NRL-13-532	Radiation Effects on Electronics in Aligned Carbon Nanotube Technology
Zerronox Corporation	NCRADA-NRL-13-539	Pulsed Electron Beams to Remove NOx Emissions from Fossil Fuel Power Plants

Naval Surface Warfare Center, Carderock Division

Non-Federal Partner	CRADA Number	Subject
ArcelorMittal Plate, LLC	NCRADA-NSWCCA-13-157	Cryogenic Steel R&D
Argon ST, Inc.	LP-CRADA-NSWCCA-14-172	Equipment Transfer of Radar Electronic Support Measures System and a Signals Intelligence System from Argon ST, Inc. to NSWCCA
ASSETT, Inc.	LP-CRADA-NSWCCA-14-162	Equipment Transfer of Command and Control System CEIBS from ASSETT, Inc. to NSWCCA
Avaex Technologies Corporation	LP-CRADA-NSWCCA-14-177	Equipment Transfer of Multiple Wide Screen HD Displays and Two (2) Multi-Channel Digital Video Recorders from Avaex Technologies Corporation to NSWCCA
Battelle Memorial Institute	LP-CRADA-NSWCCA-14-165	Equipment Transfer of a Mid-Wave Infrared Camera and an Electro-Optical Camera from Battelle Memorial Institute to NSWCCA

Naval Surface Warfare Center, Carderock Division (Continued)

Non-Federal Partner	CRADA Number	Subject
CDG Coast Dynamics Group Ltd.	NCRADA-NSWCCA-13-158	Mitigation of Wave Slam in High Speed Craft
DRS ICAS, LLC	LP-CRADA-NSWCCA-14-183	Equipment Transfer of an 18-Inch X-Band Satellite Communications On-The-Move Antenna System from DRS ICAS, LLC to NSWCCA
DRS Power & Control Technologies, Inc.	NCRADA-NSWCCA-14-171	Development of Shipboard Machinery and Power Control Systems
Furuno U.S.A., Inc.	LP-CRADA-NSWCCA-14-180	Equipment Transfer of Solid-State Marine Radar from Furuno U.S.A., Inc. to NSWCCA
Johns Hopkins University Applied Physics Laboratory	NCRADA-NSWCCA-14-175	Battery R&D
Mercury Marine	LP-CRADA-NSWCCA-13-160	Equipment Transfer of Two (2) Mercury Marine Diesel Outboard Marine Engines from Mercury Marine to NSWCCA
Navico, Inc.	LP-CRADA-NSWCCA-14-181	Equipment Transfer of Solid-State Radar from Navico, Inc. to NSWCCA
Praxis Products, LLC	LP-CRADA-NSWCCA-14-169	Equipment Transfer of Two (2) Multi-Channel Signal Intelligence Systems from Praxis Products, LLC to NSWCCA
Robotics and Conceptual Engineering, Inc.	LP-CRADA-NSWCCA-14-163	Equipment Transfer of the Raider 40 Outboard Motor from Robotics and Conceptual Engineering, Inc. to NSWCCA
Rolls-Royce Canada Ltd.	NCRADA-NSWCCA-14-159	USV Refueling R&D
SCI Technology, Inc.	LP-CRADA-NSWCCA-14-167	Equipment Transfer of TOCNET(G4) from SCI Technology, Inc. to NSWCCA
Simulyze, Inc.	LP-CRADA-NSWCCA-14-164	Equipment Transfer of Flight Control from Simulyze, Inc. to NSWCCA
Soar Technology, Inc.	LP-CRADA-NSWCCA-14-166	Equipment Transfer of HaloCOP from Soar Technology, Inc. to NSWCCA
Tecore, Inc.	LP-CRADA-NSWCCA-14-168	Equipment Transfer of 3G Raven from Tecore, Inc. to NSWCCA
University of Alaska Fairbanks	NCRADA-NSWCCA-13-155	SIKULIAQ Acoustic Research Project
University of North Texas	NCRADA-NSWCCA-13-161	Friction Stir Welding R&D

Naval Surface Warfare Center, Corona Division

Non-Federal Partner	CRADA Number	Subject
Envisioneering, Inc.	NCRADA-NSWCCORDIV-14-001	R&D of Laser Scatter Measurement in a Maritime Environment

Naval Surface Warfare Center, Crane Division

Non-Federal Partner	CRADA Number	Subject
Alpha 1 Technologies, LLC	NCRADA-NSWCCD-14-138	Commercialization of U.S. Patent Application Number 14/087,691 and U.S. Patent Number 8,531,114
Atessa, Inc.	NCRADA-NSWCCD-14-141	Assessment of Atessa, Inc. Security Products
Battery Innovation Center Institute, Inc.	NCRADA-NSWCCD-13-137	Joint R&D of Large Scale Energy Storage Array Test and Evaluation Capability
The Charles Stark Draper Laboratory, Inc.	NCRADA-NSWCCD-13-134	Anti-Tamper Assessment of Integrated Ultra High Density Electronic Modules
Flex Force Enterprises, LLC	NCRADA-NSWCCD-14-140	Joint R&D of Improved Stabilized Weapons Platforms

Naval Surface Warfare Center, Dahlgren Division

Non-Federal Partner	CRADA Number	Subject
Aerojet Rocketdyne, Inc.	NCRADA-NSWCDD-14-173	Enhanced Lethality Mortar Warhead for Ultra-Extended Range Precision Mortar Cartridge
Alliant Techsystems Operations, LLC, Armament Systems Division	LP-CRADA-NSWCDD-14-168	Material Transfer of Five (5) M339 Israel Military Industries Ltd. HE-MP-T Projectiles with X-Rays from Alliant Techsystems Operations, LLC, Armament Systems Division to NSWCDD
Battelle Memorial Institute	NCRADA-NSWCDD-13-159	Solid Oxidizer Development - Mechanistic Pathways and Formulation
First Line Technology, LLC	NCRADA-NSWCDD-14-169	Dahlgren Decontaminant

Naval Surface Warfare Center, Dahlgren Division (Continued)

Non-Federal Partner	CRADA Number	Subject
George Mason University	NCRADA-NSWCDD-14-177	Research on Lung Biology and Lung Deposition Modeling for Compounds
Huntington Ingalls, Inc., acting through its Ingalls Shipbuilding Division	LP-CRADA-NSWCDD-14-167	Material Transfer of Three (3) Prototype Cable Shield Ground Adapter Kits from NSWCDD to Huntington Ingalls, Inc., acting through its Ingalls Shipbuilding Division
Kollsman, Inc., Elbit Systems of America	NCRADA-NSWCDD-14-163	81 mm SAL Guided Mortar Fire Support System
Market Central, Inc.	NCRADA-NSWCDD-13-160	Advanced Development and Qualification of HPM Detector and Direction Finder
Solvay Chemicals, Inc.	NCRADA-NSWCDD-14-174	Commercialization of Dahlgren Decontaminant Technology
Transformatrix Technologies, Inc.	NCRADA-NSWCDD-14-165	COLLABORATOR Secure Whiteboard and Chat Capability
University of Mary Washington	NCRADA-NSWCDD-14-170	Topics in Data Mining
Virginia Polytechnic Institute and State University	NCRADA-NSWCDD-14-166	Additive Manufacturing Research

Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division

Non-Federal Partner	CRADA Number	Subject
Accurate Energetic Systems, LLC	NCRADA-NSWC-IHEODTD-14-044	R&D of Excess Energetic Materials and Energetic Waste Streams for use in Commercial Products
Advanced Aerials, Inc.	NCRADA-NSWC-IHEODTD-13-014	POSTR/MSEV Continuation of Development
BAE Systems Information and Electronic System Integration, Inc.	NCRADA-NSWC-IHEODTD-14-051	Determination of LAU-68F/A Launcher Concept on an MK 38 System
Boeing, Inc.	NCRADA-NSWC-IHD-14-040	R&D Culminating in a Weapon Solution to Arm Both Manned and Unmanned Aircraft Systems

Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division (Continued)

Non-Federal Partner	CRADA Number	Subject
Chemring Ordnance, Inc.	NCRADA-NSWC-IHEODTD-14-041	Research, Development and Manufacture of Extruded Propellants, Rocket Motor Grains, Rocket Motor Assemblies, Breaching Systems, Weapon Subsystems, and Ordnance Systems for Department of Defense Utilization
CMA Technologies, Inc.	NCRADA-NSWC-IHEODTD-14-050	JCREW and Related Technology Applications
Custom Analytical Engineering Systems, Inc.	NCRADA-NSWC-IHEODTD-14-053	Special Purpose Munition Engineering R&D
Johns Hopkins University	NCRADA-NSWC-IHD-013-030	R&D of Biocidal Efficiency of Laminate Particles for Bt Spores
Marquette University	NCRADA-NSWC-IHEODTD-13-015	R&D of the Flow Around a Dart as it Penetrates Sand
NAMMO TALLEY	NCRADA-NSWC-IHEODTD-14-061	Development of Improved Design, Production, and Component Availability for CAD/PAD Applications Including MK-122 PDRM
Ondax, Inc.	NCRADA-NSWC-IHEODTD-14-057	Detection and Source Attribution of Homemade Explosives and Chemical Threat Agents Using New Low-Frequency/THz-Raman Spectroscopy Systems
RWM Italia Spa	NCRADA-NSWC-IHEODTD-14-039	Insensitive Explosives and Munitions R&D
Smiths Detection, Inc.	NCRADA-NSWC-IHD-14-063	R&D of Raman Spectra for the ACE-ID, Hand-Held Raman
TMD Technologies, LLC	NCRADA-NSWC-IHEODTD-14-060	Explosive Ordnance Disposal Underwater Systems Technology Transition, Characterization and Systems Engineering

Naval Undersea Warfare Center, Division Newport

Non-Federal Partner	CRADA Number	Subject
GCS Holdings, Inc.	NCRADA-NUWC-DIVNPT-13-844	Commercial Evaluation of BDRA
GCS Holdings, Inc.	NCRADA-NUWC-DIVNPT-13-858	Infrastructure Protection
GCS Holdings, Inc.	NCRADA-NUWC-DIVNPT-NPC-14-888	Defense Applications of Geospatial Information Systems

Naval Undersea Warfare Center, Division Newport (Continued)

Non-Federal Partner	CRADA Number	Subject
Juliet Marine Systems, Inc.	LP-CRADA-NUWC DIVNPT-13-843	Permit Use of Sound Basin Ramp at the Stillwater Basin from NUWC DIVNPT to Juliet Marine Systems, Inc.
Mitre Corporation	NCRADA-NUWC DIVNPT-14-871	Application of Radar Technology to the Multi-Static Sonar Problem
Physical Sciences, Inc.	NCRADA-NUWC DIVNPT-14-860	Assessment of Advanced Processor Architectures for Real-Time Sonar Signal-Processing Applications
Thales Underwater Systems S.A.S.	NCRADA-NUWC DIVNPT-13-857	Materials Characterization of Ternary PMN-PIN-PT Single Crystals
University of Connecticut	NCRADA-NUWC DIVNPT-14-865	ACOMMS Investigation
University of Rhode Island Research Foundation	NCRADA-NUWC DIVNPT-13-801	Miniaturized Gas Detectors for Explosives and Explosive Precursors

Naval War College

Non-Federal Partner	CRADA Number	Subject
The Boeing Company Phantom Works Strategic Development & Experimentation	NCRADA-NWC-13-013	Naval Warfare Analysis and Research IAMD Modeling and Simulation Development
The Boeing Company Phantom Works Strategic Development & Experimentation	NCRADA-NWC-14-015	Naval Warfare Analysis and Research Layered Network Communications Modeling and Simulation Development
Lockheed Martin Information Systems & Global Solutions	NCRADA-NWC-13-012	Naval Warfare Analysis and Research Integrated Air and Missile Defense Modeling and Simulation Development
Northrop Grumman Systems Corporation, acting through its Information Systems Sector, Federal and Defense Technologies Division	NCRADA-NWC-13-011	Naval Warfare Analysis and Research Integrated Air and Missile Defense V Modeling and Simulation Development
Raytheon Company, Integrated Defense Systems	NCRADA-NWC-13-014	Naval Warfare Analysis and Research Modeling and Simulation Development

Office of Naval Research

Non-Federal Partner	CRADA Number	Subject
Environmental Systems Research Institute, Inc.	NCRADA-ONR-14-011	ONR Advanced Analytics and ESRI ArcGIS Geospatial Data Integration

Space and Naval Warfare Systems Command, Systems Center Atlantic

Non-Federal Partner	CRADA Number	Subject
Lockheed Martin	NCRADA-SPAWARSYSCEN-14-001	Development of Interface for Data Ingest Services
The University of West Florida	NCRADA-SSC ATLANTIC-13-01	Sufficient Conditions for D ₃ -Cycles and Latin Square Research

Space and Naval Warfare Systems Command, Systems Center Pacific

Non-Federal Partner	CRADA Number	Subject
Auburn University	NCRADA-SSC PACIFIC-13-207	Efficient and Reconfigurable Algorithms for Digital Signal Processing
The Boeing Company	NCRADA-SSC PACIFIC-13-209	Advanced Autonomous Interoperability for Small Unmanned Platforms in all Domains
MDA Geospatial Services, Inc.	LP-CRADA-SSC PACIFIC-13-208	Material Transfer of One (1) CD of the RAPIER Ship Detection Systems from SSC PACIFIC to MDA Geospatial Services, Inc.
MDA Geospatial Services, Inc. and MDA Systems Ltd.	LP-CRADA-SSC PACIFIC-14-213	Material Transfer of One (1) CD of the RAPIER Ship Detection System from SSC PACIFIC to MDA Geospatial Services, Inc. and MDA Systems Ltd.
Merck Sharp & Dohme Corporation	LP-CRADA-SSC PACIFIC-13-209	Material Transfer of Ten (10) Vials of Formulated Live Attenuated Measles Vaccine from Merck Sharp & Dohme Corporation to SSC PACIFIC
Nanomedical Diagnostics, Inc.	NCRADA-SSC PACIFIC-14-214	Graphene Biosensors for Disease Diagnosis
Oceus Networks, Inc.	LP-CRADA-SSC PACIFIC-14-212	Equipment Transfer of Satellite Communications Hardware, Sensors and Software Applications from Oceus Networks, Inc. to SSC PACIFIC

Space and Naval Warfare Systems Command, Systems Center Pacific (Continued)

Non-Federal Partner	CRADA Number	Subject
Radiant Technologies, Inc.	NCRADA-SSC PACIFIC-14-211	Ferroic Materials and Applications
Scripps Health	NCRADA-SSC PACIFIC-14-215	Advanced Technologies for Health Informatics

United States Naval Academy

Non-Federal Partner	CRADA Number	Subject
CACI International, Inc. – Federal	NCRADA-USNA-14-CCSS001	CACI Cyber Warfare Internship Program for USNA Midshipmen
General Electric Company, acting through GE Global Research	NCRADA-USNA-13-RODRS005	Educational Research Opportunities at General Electric Company Locations for USNA Midshipmen
The J.F. White Contracting Company	NCRADA-USNA-14-OCEAN001	Deep Sea Technology Systems Research
The Lockheed Martin Corporation	NCRADA-USNA-13-RODRS004	Collaborative Educational and Research Activities
ReefPoint Group, LLC	NCRADA-USNA-14-MATH006	Cooperative Research and Educational Program in Managerial Applications of Operations Research
United Launch Alliance, LLC	NCRADA-USNA-14-AERO005	Rocket Engineering Research and Design with United Launch Alliance

This page intentionally left blank.